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Mountains of the Mist: A first plant checklist for the Bvumba Mountains, Manica Highlands (Zimbabwe-Mozambique)

Jonathan Timberlake[1], Petra Ballings[2,3], João de Deus Vidal Jr[4], Bart Wursten[2], Mark Hyde[2], Anthony Mapaura[4,5], Susan Childes[6], Meg Coates Palgrave[2], Vincent Ralph Clark[4]

1 *Biodiversity Foundation for Africa, 30 Warren Lane, East Dean, E. Sussex, BN20 0EW, UK* **2** *Flora of Zimbabwe & Flora of Mozambique projects, 29 Harry Pichanick Drive, Alexandra Park, Harare, Zimbabwe* **3** *Meise Botanic Garden, Bouchout Domain, Nieuwelaan 38, 1860, Meise, Belgium* **4** *Afromontane Research Unit & Department of Geography, University of the Free State, Phuthaditjhaba, South Africa* **5** *National Herbarium of Zimbabwe, Box A889, Avondale, Harare, Zimbabwe* **6** *Box BW53 Borrowdale, Harare, Zimbabwe*

Corresponding author: Vincent Ralph Clark (vincentralph.clark@gmail.com)

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Abstract

The first comprehensive plant checklist for the Bvumba massif, situated in the Manica Highlands along the Zimbabwe-Mozambique border, is presented. Although covering only 276 km^2, the flora is rich with 1250 taxa (1127 native taxa and 123 naturalised introductions). There is a high proportion of Orchidaceae and Pteridophyta, with both groups showing a higher richness than for adjacent montane areas, which may be due to the massif's relatively high moisture levels as a result of frequent cloud cover. However, in contrast to other mesic montane regions in southern Africa, there are relatively few near-endemic or range-restricted taxa: there is only one local endemic, *Aeranthes africana*, an epiphytic forest orchid. This is likely to be an effect of the massif having limited natural grassland compared to forest, the former being the most endemic-rich habitat in southern African mountains outside of the Fynbos Biome. Six other near-endemic taxa with limited distribution in this portion of the Manica Highlands are highlighted. The high number of invasive species is probably a result of diverse human activities in the area. The main species of concern are *Acacia melanoxylon*, a tree that is invading grassland and previously cultivated land, the forest herb *Hedychium gardnerianum* which in places is transforming forest understorey with an adverse

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effect on some forest birds, and the woody herb *Vernonanthura polyanthes* which invades cleared forest areas after fire. Future botanical work in the massif should focus on a more detailed exploration of the poorly known Serra Vumba on the Mozambican side and on the drier western slopes. This will allow for a more detailed analysis of patterns of endemism across the Manica Highlands.

Keywords
endemics, floristics, invasive species, Manica Highlands, montane, plant diversity

Introduction

Southern African mountains continue to fascinate biologists, ecologists and conservationists with their high endemism, high species diversity, and as a haven for taxonomically complex and cryptic evolutionary lineages (White 1978; Taylor et al. 2013; Uys and Cron 2013; Conradie 2014; Mynhardt et al. 2015; Padayachee and Procheş 2016; Phiri and Daniels 2016; Conradie et al. 2018; Branch et al. 2019). From a floristic perspective, there has been a steady output of comprehensive data from the region over the past 25 years, for example the Nyika Plateau (Burrows and Willis 2005) and Mount Mulanje (Strugnell 2006) in Malawi; Mounts Gorongosa, Mabu and Namuli (Müller et al. 2008; Timberlake et al. 2009; Bayliss et al. 2014; Timberlake, in prep.) in Mozambique; Chirinda Forest (Drummond and Mapaure 1994) in Zimbabwe; the Angolan Highlands (Goyder and Gonçalves 2019); the heterogeneous southern African Great Escarpment (Clark et al. 2011, 2014; Roth et al. 2014; Darbyshire et al. 2018; Carbutt 2019). This has greatly improved our regional understanding of montane floristics, patterns of endemism, biogeography and conservation needs. In addition, an account of all the endemic and near-endemic plants from Mozambique has recently been published (Darbyshire et al. 2019b), some of which occur in these border areas. Despite these advances, ongoing biodiversity research in southern African mountains remains a key regional need (Clark et al. 2011, 2019; CEPF 2012), and there remains a substantial lag in the production of fundamental biodiversity and taxonomic data compared to other mountains in Africa.

The Manica Highlands (Clark et al. 2017), which lie on the border between Zimbabwe and Mozambique and are mostly synonymous with Van Wyk and Smith's (2001) Chimanimani-Nyanga Centre of Floristic Endemism, comprise an area that has been well-botanised over the last 100 years, yet with few publications. Over the past decade, attention has been focused on improving our knowledge of plant diversity and endemism for this ecologically complex 8,000 km^2 mountain system. For instance, the first comprehensive floristic treatment of the Nyanga massif was published only recently (Clark et al. 2017), as was the first substantial revision in 50 years of the Chimanimani flora (Wursten et al. 2017).

The central parts of the Manica Highlands (from north to south: Stapleford, Penhalonga, Bvumba, Banti, Himalaya, Tsetserra) are now the outstanding areas that require synthesis of available data and further fieldwork, with the Bvumba being prob-

ably the most thoroughly botanised component of the Manica Highlands. Here we present the first comprehensive plant checklist for the Bvumba massif, with some notes on the massif and its flora.

The Bvumba area

Defining the study area

Clark et al. (2017) defined the Bvumba as the entire central component of the Manica Highlands, which includes the Bvumba as well as the Penhalonga and Stapleford uplands that occur immediately to the north, i.e. between the Bvumba and Nyanga. However, due to lack of adequate floristic data for Penhalonga and Stapleford, we here restrict ourselves to the Bvumba massif *sensu stricto* and not to the broader Bvumba area as shown in Clark et al. (2017). The checklist area is defined as that part lying primarily above 1200 m altitude with significant vegetation cover, an extent of around 276 km^2, and differs slightly from the more rigid use of the 1200 m contour used by Childes and Mundy (2001).

Location and topography

Centred on 19°06'S, 32°47'E, the Bvumba lies 20 km south-east of the border city of Mutare and straddles the Zimbabwe-Mozambique border (Figure 1). The largest extension lies within Mutare District in eastern Zimbabwe, but a significant area of around 30 km^2 lies over the border in Manica District in Mozambique's Manica Province. This north-eastern extension terminates at the peak of Serra Vumba (1646 m) at 18°58'35"S, 32°53'25"E, just 5 km south of Manica town (previously Vila da Manica) on the main Mutare–Beira highway. The area as a whole is bounded in the north by the Muneni valley (in which the Forbes/Machipanda border post is situated) and in the south by the Burma valley (Nyamataka River), which separates it from the Banti-Himalaya-Tsetserra massif. The Mozambique midlands/lowlands and Chicamba Real dam form the eastern limits, while the Odzi River valley forms the western boundary. Outlying ridges and inselbergs to the west – including Cecil Kop – have been excluded. The lower elevational cut-off of approximately 1000–1200 m used here roughly follows the base of the Bvumba massif where it emerges from the surrounding plains.

Consisting of an upland massif, the highest points in the study area are Castle Beacon (1911 m) and Chinyakwaremba (1714 m), while the main rivers are the Nyamataka in the south, which drains into the Rio Vanduzi via the Chicamba Real dam and then on into the Rio Búzi, the Zonwe River in the centre and the Ndonwe River in the north, both also draining into the Vanduzi. To the west the main river is the Nyachowa, which drains into the Odzi and eventually into the Save River.

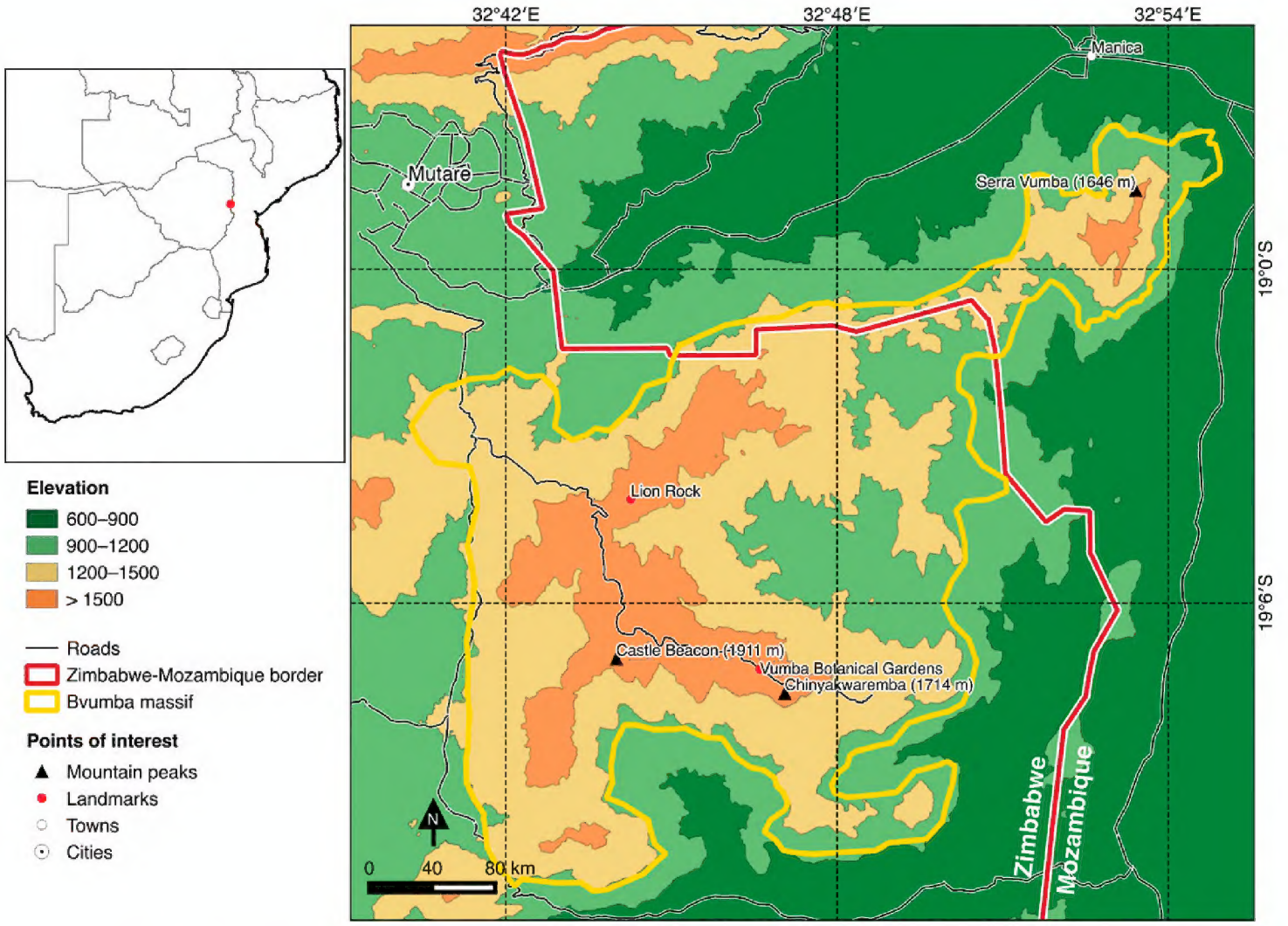

Figure 1. Map of the geographic location and selected elevations of the Bvumba massif and vicinities, with main points of interest.

Geology

The principal rocks underlying the Bvumba area are gneissic granites of Proterozoic age, perhaps 2560 million years old, interlaced with intrusions of finer-grained darker dolerite rock perhaps 1800 million years old (Bartholomew 1990; Martin 2000). Millions of years of erosion have left the granite domes exposed, standing above the surrounding younger landscape. Some peri-glacial features date from the Pleistocene period (25,000 years BP). No minerals of economic significance are noted, although gold has been mined for hundreds of years from areas just north of Mutare. The soils are often deep and well-weathered, but are not considered particularly fertile owing to their age and weathering.

Climate

Surprisingly, there does not appear to be a long-term rainfall recording station in the Bvumba area (Agritex 1989), the nearest being at Mutare, which is significantly lower in elevation and with a lower annual rainfall. On isohyet maps, rainfall is indicated as being around 1800 mm/year (Agritex 1989). The warm rainy or growing season extends from November to mid-March, with a colder dry season from June through

to August. Frosts are scarce. A major feature, and one which gives the mountains their name of Mountains of the Mist, are the frequent mists and low moist cloud during the dry season, sometimes called *guti* (Martin 2000). It is these mists that reduce the physiological stress of the dry season for many plant species and allow forest to thrive.

History and land use

The area has been settled, on the Mozambique side in particular, for perhaps 1000 years, with the first written record of people living there dating from Portuguese explorers in the first half of the 17th century (Bannerman 2010; Martin 2000). It was possibly more heavily settled in the past than it is now, as seen from the many grinding stones found inside the forests. When European occupation first started, much of the area was settled by people of the Chirara dynasty (Martin 2000), particularly on the Mozambique side and along the Nzombe valley. The first European settlement on the Zimbabwe side started around 1890, and the first formal concession was granted by the British South African Company for the farm Cloudlands in 1898, now a private nature reserve. A road was cut in 1917 to the Bunga Forest from Mutare (then Umtali), and by 1921 the road continued over and into the Burma Valley (Martin 2000).

Within Zimbabwe, the Bvumba area is now nearly all on privately held land, much of it in small agricultural holdings, plantations or managed for conservation or eco-tourism, including the famous Leopard Rock Hotel and golf course. There is a good road network and the area is well-settled with many properties, a number of which are used as holiday homes with many owners making strong efforts to conserve both the flora and bird life. Commercial farming in the Bvumba area includes dairy, *Protea* flowers, coffee, and with some wattle and *Eucalyptus* plantations. The only formal conservation areas are the Bvumba National Park and Botanic Gardens (201 ha) and the now much-expanded Bunga Forest Botanical Reserve (1,560 ha) managed by the Zimbabwe Parks and Wildlife Management Authority. There are no formally conserved areas on the Mozambique side, although from recent Google Earth imagery much of Serra Vumba's vegetation cover appears to be relatively intact and it may be protected by local traditions.

Vegetation

There are four broad vegetation types occurring in the Bvumba area – montane grassland, Afromontane evergreen forest, high-rainfall miombo woodland, and secondary scrub savanna (Martin 2000). The edges of the forests are surrounded by a dense scrub of *Pteridium*, *Smilax*, *Buddleja*, *Vangueria* and *Vernonia* (Childes and Mundy 2001). In addition, there are plantations of exotic timber trees and cultivated or fallow agricultural land. It is possible that montane forest originally covered much of the Bvumba, principally owing to dry season precipitation in the form of low wet clouds (*guti*). But

there is little montane grassland, a vegetation type of great botanical significance in the Nyanga and Chimanimani areas (Timberlake et al. 2016a). It is not clear why this is so, but it might be due to the somewhat lower elevations of the Bvumba compared to Nyanga and/or the greater amount of winter precipitation that allows forest to sustain itself. The high-rainfall woodlands contain many epiphytic ferns and orchids, which also have a high frequency in montane forest. Burrows (1990) suggests that the Bvumba has perhaps the richest fern flora in southern Africa owing to the pervasive mists. Secondary scrub savanna is generally found on infertile or gravelly soils or in degraded forests or reverted agricultural land, and it is here that a number of invasive tree and shrub species are found (S. Childes, pers. obs.).

Previous studies

The Bvumba has seen much botanical activity and many collections over the last 50 years, but almost entirely from the Zimbabwe side. Two notable collectors were Norman Chase, who assembled over 8,000 specimens with meticulous notes, mostly from the Manica Highlands but with a large number from the Bvumba, and John Ball, for whom the Bvumba and Chimanimani provided the inspiration for his book on epiphytic orchids (Ball 1978). Other significant collectors include Hiram Wild, Darrel Plowes, Tom Müller and Hamish Gilliland. Three of the current authors (Mark Hyde, Petra Ballings and Bart Wursten) have collected extensively there over the last 20 years, and another (Susan Childes) runs a small forest and bird conservation area. Although no comprehensive overall checklist was available, detailed lists of the orchids and ferns of the broader area are found on the Vumba Nature website (Ballings and Wursten 2019) and a preliminary Bvumba plant list was compiled by Mark Hyde from a manuscript list by Norman Chase (Chase, no date) and Tree Society and Orchid Society records (Hyde 1999).

The Bvumba Highlands are considered to be an Important Bird Area (IBA ZW004, Childes and Mundy 2001), known for the richness of its montane avifauna. The IBA is taken to be the area above 1200 m elevation, considered to be the lower limit for montane bird species (Harwin et al. 1994). A total of 242 bird species have been recorded, including three of global conservation concern.

The only detailed plant ecological work done so far specifically in the Bvumba area is that by Plowes (2002), who looked at the impacts of the devastating Cyclone Eline on the 40-ha Bunga Forest in February 2000. He noted nearly 200 fallen trees that had created 46 patches totalling 1.57 ha, equivalent to a loss of 13% of forest cover. Gilliland (1938), in his study of the vegetation of Zimbabwe's Manicaland, surprisingly does not mention areas this far south.

During his major study on Eastern Zimbabwe's moist forests (Müller 1999, 2006), Tom Müller recorded 37 georeferenced 50 × 50 m forest plots in the Bvumba area. These fell into seven of his 12 described forest types, with most being Type 5 (*Syzygium guineense* subsp. *afromontanum* montane forest, 10 plots), Type 7 (Mixed

sub-montane forest, 8 plots) and Type 11 (Medium elevation forest, 8 plots). In addition, there were a few plots each of Type 6 (Regenerating montane forest), Type 8 (*Craibia brevicaudata* forest), Type 9 (*Albizia*-dominated regenerating forest) and Type 10 (*Albizia schimperiana* forest). Hence most of the Bvumba forest plots recorded fell into what Muller calls sub-montane forest, with only a few from the montane or medium elevation forest zones. An interesting finding is that of the 37 plots marked on aerial photographs from the early 1970s, only three have been obviously lost or damaged from what can be seen of their canopy cover using recent Google Earth imagery (most dating from June 2019).

Although not formally documented, it does appear that disturbance over the last 100 years has led to a drying out of some of the forests and an invasion of alien plants (T. Müller, pers. comm. 2017). The impression (S. Childes, pers. obs.) is that the fern flora is moving towards the more generalist species and that some drought-sensitive species of angiosperms such as *Streptocarpus umtaliensis* and *Cryptostephanus vansonii* are reducing.

Materials and methods

As the Bvumba is well-documented botanically, with approximately a century of botanical collecting, a checklist approach to documenting plant diversity and endemism was decided upon in order to be comparable to floristic lists recently compiled for Nyanga massif (Clark et al. 2017) and the Chimanimani mountains (Wursten et al. 2017). The two main sources were (i) an extract of the Harare Herbarium (SRGH) database of all records containing the word 'Vumba' in the locality field, with any records obviously from below 1200 m elevation removed, and (ii) records from the Bvumba area above 1200 m elevation cited on the Flora of Zimbabwe website (https://www.zimbabweflora.co.zw/, Hyde et al. 2020). In addition to these there were (iii) records from published volumes of Flora Zambesiaca, (iv) orchid and pteridophyte records listed on the Nature Vumba website (Ballings and Wursten 2019), (v) confirmed records from an unpublished Bvumba checklist (Hyde 1999) including those cited as being from Chase's list (Chase, no date), (vi) any additional records from forest plot studies undertaken by Müller in the 1970s (Müller 2006), and finally (vii) personal records from the authors. A herbarium specimen or record citation (i.e. from the Flora of Zimbabwe website) is given for each taxon, or a confirmed sighting (s.r.) indicated. If there was any uncertainty over an occurrence, the record was omitted.

Families and species are listed alphabetically under pteridophytes, gymnosperms, monocotyledons and dicotyledons. Nomenclature and family arrangement follow those used on the Flora of Zimbabwe website (Hyde et al. 2020, accessed 1 February 2020). Pteridophyte families follow that used in the Pteridophyte Phylogeny Group (2016). Species authorities are abbreviated following Brummitt and Powell (1992). Synonyms are given only for significant recent changes or for taxa that have been known or recorded locally under a different name (e.g. in Mapaura and Timberlake

2004) or where confusion may occur. Where a taxon is believed to be endemic or near-endemic, this is indicated with an E or NE, respectively. Species that are said to be naturalised or introduced on the Flora of Zimbabwe website are indicated with an asterisk (*).

Results and discussion

The checklist contains 1250 taxa, comprising 137 pteridophytes, 2 gymnosperms and 1111 flowering plants (Table 1). Of these, 1127 are native species and 123 (9.8%) are naturalised or semi-naturalised introductions, most, unsurprisingly, being cosmopolitan weeds in the Asteraceae (25 species), Poaceae (8 species) and Amaranthaceae (7 species). The largest families represented in the checklist are shown in Table 2.

In terms of species, there are three findings of particular note. First, there is a particularly high number of orchids (125 taxa across 276 km^2), higher than might have been expected and significantly more than the number found in the more extensive Nyanga area above 1200 m elevation (92 taxa across 2181 km^2; Clark et al. 2017) and in the Chimanimani mountains (97 taxa across 530 km^2; Wursten et al. 2017). There are also a large number – 137 taxa – of pteridophytes (particularly ferns), compared to 136 taxa in the Nyanga area and just 105 in the Chimanimani. This is probably due to the greater moisture levels and frequent clouds in the Bvumba; the area is said to be possibly the richest locality for pteridophytes in southern Africa (Burrows 1990).

The third point of interest, again possibly linked to the high precipitation levels, is the lack of the montane conifer *Widdringtonia nodiflora* on the Bvumba, a species

Table 1. Total number of taxa and introduced taxa in the Bvumba checklist, by group.

	No. taxa	No. introduced
Pteridophytes	137	1
Gymnosperms	2	1
Monocotyledons	336	15
Dicotyledons	775	106
TOTAL	1250	123

Table 2. The 10 largest families represented on the Bvumba checklist.

Family	No. taxa
Orchidaceae	125
Asteraceae	119
Fabaceae *sensu lato*	93
Poaceae	93
Rubiaceae	59
Acanthaceae	33
Lamiaceae	29
Cyperaceae	28
Aspleniacaeae (Pteridophyta)	27
Apocynaceae	22

that is locally common both in the Nyanga and Chimanimani areas as well as on Mt Mulanje in southern Malawi (where it also occurs with *W. whytei*) and Mt Gorongosa in Mozambique (Müller et al. 2008). *Widdringtonia* is generally found on the drier rain-shadow side of these large mountains.

Endemics and taxa of restricted distribution

There is only one taxon known to be endemic to the Bvumba, the epiphytic orchid *Aeranthes africana*. Noted just twice, it is apparently now not found in its first-recorded location in the forests near Castle Beacon (S. Childes, pers. comm.). This species was recently assessed using IUCN Red List criteria (IUCN 2001) as Critically Endangered (Timberlake 2020, in press) and could be almost extinct, but it is cryptic among the leaves of *Podocarpus milanjianus* and difficult to see except on fallen branches so may have been overlooked.

Six other near-endemic taxa – here defined as taxa found only on nearby montane massifs such as Nyanga, Serra Choa, Stapleford, Banti/Himalaya and Tsetserra, but not including those also found on the Chimanimani or further afield (including Chirinda and Mt Gorongosa) – are found in the Bvumba area (Table 3). Two of them – *Aloe cameronii* var. *bondana* and *Aloe inyangensis* var. *kimberleyana* – are varieties of more widespread species and thus of lesser taxonomic significance; both have recently been assessed as Least Concern using IUCN criteria (Timberlake, in press). Of the remaining four taxa, *Barleria fissimuroides* is restricted to just the Bvumba area and a farm just over the border in Mozambique north of Mutare, but three are more widespread, being found from Serra Choa in Mozambique or over the border in Nyanga south to the Himalaya/Tsetserra area or, in the case of *Anthospermum zimbabwense*, to Mt Pene

Table 3. Taxa of restricted distribution found in the Bvumba area.

Family/species	Distribution	IUCN Red List assessment
Asphodelaceae		
Aloe cameronii *Hemsl.* var. bondana *Reynolds*	Troutbeck, Juliasdale, Bvumba	LC
Aloe inyangensis *Christian* var. kimberleyana *S.Carter*	Nyanga NP, Juliasdale, Stapleford, Bvumba	LC
Orchidaceae		
Aeranthes africana *J.L.Stewart*	Bvumba [endemic]	CR D
Acanthaceae		
Barleria fissimuroides *I.Darbysh.*	Bvumba, Quinta da Frontiera	EN B2ab
Gesneriaceae		
Streptocarpus umtaliensis *B.L.Burtt*	Serra Choa, Nyanga, Stapleford, Bvumba, Tsetserra	LC
Loranthaceae		
Englerina oedostemon *(Danser) Polhill & Wiens*	Serra Choa, Nyanga, Stapleford, Mutare, Bvumba, Tsetserra	–
Rubiaceae		
Anthospermum zimbabwense *Puff*	Nyanga, Stapleford, Bvumba, Himalaya, Mt Pene	NT B1ab+2ab

in Chimanimani District. Only one of the near-endemic taxa is threatened, *B. fissimuroides* (Endangered, Darbyshire et al. 2019a). Also of note is the orchid *Angraecum stella-africae*, believed to be extinct in Zimbabwe (Mapaura and Timberlake 2002), but a small colony has been found on the Bvumba in recent years (Wursten 2007). This species has also been found in Malawi (Viphya, Mt Mulanje) and northern South Africa (Wolkberg Mountains) but is nowhere common.

It is surprising that the Bvumba massif has so few endemic or near-endemic taxa, especially when compared to the Chimanimani Mountains (71 endemic taxa, Wursten et al. 2017) or the Nyanga area (19 endemic taxa, revised from Clark et al. 2017). This is obviously not due to under-collection, but possibly the result of the relatively small size of the Bvumba and the preponderance of forest vegetation compared to montane grassland and scrub habitats. Most Nyanga and Chimanimani endemics, for example, are found in montane grassland or montane scrub (Clark et al. 2017; Wursten et al. 2017), habitats poorly represented in the Bvumba and which are also substantially disturbed there.

Introduced and invasive species

There are 123 introduced species present in the Bvumba, a result of the diverse human activities there. Although most of these non-native species are benign, a handful are causing major problems. In contrast to other parts of the Manica Highlands, the Bvumba has a high proportion of introduced species that are garden escapes while the rest of the Manica Highlands is affected more by those from commercial forestry.

Invasive woody invasive species on the Bvumba are typically those also found in other parts of the Manica Highlands, and include the Australian *Acacia mearnsii* (wattle) and *A. melanoxylon* (Australian Blackwood) and *Pinus patula*. Australian Blackwood is a particular problem, taking over tracts of open grassland and areas previously under *Protea* cultivation (S. Childes, pers. obs.). Other woody but non-commercial species that have naturalised and have invasive potential (based on evidence elsewhere in the region) are *Bauhinia variegata* var. *variegata*, *Cinnamomum camphora*, *C. verum*, *Homalanthus populifolius*, *Jacaranda mimosifolia*, *Psidium cattleianum*, *P. guajava*, *Sambucus canadensis* and *Syzygium jambos*. Classic invasive shrubs are *Lantana camara* and *Solanum mauritianum*, for which there are no easy management solutions, while *Cestrum aurantiacum* is clearly a local problem. A more recent challenge is *Vernonanthura polyanthes* – locally called 'Beebush' – which has become rampant since it spread into the Bvumba and Chimanimani areas after its introduction from Brazil to Mozambique (Timberlake et al. 2016b). It spreads rapidly into disturbed and burnt areas that were under wattle, blackwood or eucalyptus (S. Childes. pers. obs.). Clark et al. (2019) postulate that Cyclone Idai (March 2019) might have encouraged the spread of this wind-dispersed species even further afield, although it had earlier also been encountered on the Ribáuè mountains in northern Mozambique (I. Darbyshire, pers. comm. 2017). Indigenous montane forests are being invaded by the garden escap-

ees *Tradescantia fluminensis* and *T. zebrina*, while perhaps the worst forest invader is *Hedychium gardnerianum* – a species that can transform the forest understory and has adverse effects on ground-foraging birds such as Orange Thrush (*Geokichla gurneyi*), Buff-spotted Flufftail (*Sarothrura elegans*) and Cinnamon Dove (*Columba larvata*) that need an open understory with leaf litter (S. Childes, pers. obs.).

Limitations and future work

Despite the detailed collections, this list is a compilation. As a result, some taxa may have been accidentally omitted whereas others that are found only below 1200 m elevation may have inadvertently been included. In particular, it should be recognised that there are virtually no records from Serra Vumba on the Mozambique side, an area that needs a more detailed collection. Similarly, the drier western slopes of the Bvumba in Zimbabwe have also been undercollected (J. Burrows, pers. comm.). However, with these provisos we estimate that the list is over 90% complete, suggesting a total indigenous flora of around 1250 taxa, of which approximately 1100 would be native flowering plants.

The remaining data gaps for the botanical inventory of the Manica Highlands are centred on the areas immediately to the north and south of the Bvumba, namely Penhalonga-Stapleford and Banti-Himalaya-Tsetserra, respectively. However, some recent survey work has been conducted on Tsetserra and a list of the endemic and range-restricted species has been compiled for that area (J. Osborne, pers. comm.). In contrast to Nyanga, Chimanimani and Bvumba, which had comprehensive available data with which to work, both areas require detailed botanical collecting before reliable lists can be compiled.

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Appendix 1

Table A1. Vascular plant checklist for the Bvumba area, E Zimbabwe above 1200 m altitude. Nomenclature follows the Flora of Zimbabwe website (Hyde et al. 2020) with some minor changes. * – introduced species; E – endemic species; NE – near-endemic; FoZ # – Flora of Zimbabwe website record number; s.r. – sight record.

Name / authority	Voucher
PTERIDOPHYTA	
Anemiaceae	
Pteris quadriaurita Retz subsp. *catoptera* (Kunze) Schelpe	Chase 7485
Mohria lepigera (Baker) Baker	Chase 3823
Mohria nudiuscula J.P.Roux	Chase 7033
Mohria vestita Baker	Ballings & Wursten 875
Aspleniaceae	
Asplenium aethiopicum (Burm.f.) Bech. agg.	Chase 7044
Asplenium anisophyllum Kunze	Chase 3471
Asplenium blastophorum Hieron.	Müller 3071
Asplenium boltonii Brause & Hieron.	Müller 3051
Asplenium ceii Pic.Serm.	Ballings & Wursten 39
Asplenium dregeanum Kunze	Chase 3457
Asplenium erectum Willd.	Ballings & Wursten 40
Asplenium flexuosum Schrad.	Chase 3252
Asplenium formosum Willd.	Burrows 2151
Asplenium friesiorum C.Chr.	Chase 1018
Asplenium gemmiferum Schrad.	Ballings s.r.
Asplenium hypomelas Kuhn	Chase 7145
Asplenium inaequilaterale Willd.	Chase 3516
Asplenium linckii Kuhn	Chase 5989
Asplenium lividum Kuhn	Chase 6571
Asplenium lobatum Pappe & Raws.	Chase 3535
Asplenium mannii Hook.	Chase 3526

Name / authority	Voucher
Asplenium monanthes L.	Chase 4663
Asplenium preussii Brause	Burrows 1667
Asplenium protensum Schrad.	Chase 3514
Asplenium pumilum Sw.	Chase 6990
Asplenium rutifolium (P.J.Bergius) Kunze	Chase 3137
Asplenium sandersonii Hook.	Chase 3490
Asplenium simii A.F.Braithw.& Schelpe	Chase 7253
Asplenium stuhlmannii Hieron.	Chase 3495
Asplenium sulcatum Lam.	Chase 6558
Asplenium theciferum (Kunth) Mett.	Ballings & Wursten 19
Athyriaceae	
Athyrium newtonii Baker	Ballings & Wursten 860
Athyrium schimperi Feé	Chase 4407
Deparia boryana (Willd.) M.Kato	Ballings & Wursten 857
Diplazium nemorale (Baker) Schelpe	Chase 5701
Diplazium zanzibaricum (Baker) C.Chr.	Chase 6092
Blechnaceae	
Blechnum attenuatum (Sw.) Mett.	Chase 3421
Blechnum tabulare (Thunb.) Kuhn	Chase 3356
Cyathea capensis (L.f.) Sm.	Eyles 3639
Cyathea dregei Kunze	Chase 6047
Cyathea manniana Hook.	Chase 6696
Cyathea thomsonii Baker	Chase 6219
Davalliaceae	
Davallia chaerophylloides (Poir.) Steud.	Chase 31810
Dennstaedtiaceae	
Blotiella glabra (Bory) R.M.Tryon	Chase 6275
Blotiella natalensis (Hook.) R.M.Tryon	Chase 3364
Histiopteris incisa (Thunb.) J.Sm.	Fisher 1303
Hypolepis sparsisora (Schrad.) Kuhn	Chase 4585
Pteridium aquilinum (L.) Kuhn subsp. *capense* (Thunb.) C.Chr.	Wursten & Ballings 1194
Didymochlaenaceae	
Didymochlaena truncatula (Sw.) J.Sm.	Fisher 1330
Dryopteridaceae	
Arachniodes webbiana (A.Braun) Schelpe subsp. *foliosa* (C.Chr.) Gibby	Ballings & Wursten s.r.
Ctenitis cirrhosa (Schumach.) Ching	Ballings & Wursten s.r.
Dryopteris athamantica (Kunze) Kuntze	Chase 1048
Dryopteris kilemensis (Kuhn) Kuntze	Chase 2034
Dryopteris manniana (Hook.) C.Chr.	Chase 6572
Dryopteris pentheri (Krasser) C.Chr.	Ballings & Wursten 24
Megalastrum lanuginosum (Kaulf.) Holttum	Ballings & Wursten 877
Nothoperanema squamiseta (Hook.) Ching	Burrows 1910
Polystichum transvaalense N.C.Anthony	Chase 1104
Polystichum zambesiacum Schelpe	Chase 7489
Gleicheniaceae	
Dicranopteris linearis (Burm.f.) Underw.	Ballings 7
Hymenophyllaceae	
Abrodictyum rigidum (Sw.) Ebihara & Dubuisson	Burrows 2383
Crepidomanes inopinatum (Pic.Serm.) J.P.Roux	Ballings & Wursten 853
Crepidomanes melanotrichum (Schltdl.) J.P.Roux	Chase 3302
Didymoglossum erosum (Willd.) J.P.Roux	Wild 6443
Hymenophyllum capense Schrad.	Burrows 2681
Hymenophyllum kuhnii C.Chr.	Ballings & Wursten 1623
Polyphlebium borbonicum (Bosch.) Ebihara & Dubuisson	Ballings & Wursten 60
Lomariopsidaceae	
Elaphoglossum acrostichoides (Hook.& Grev.) Schelpe	Chase 6287
Elaphoglossum aubertii (Desv.) T.Moore	Chase 4509
Elaphoglossum kuhnii Hieron.	Chase 3413
Elaphoglossum lancifolium (Desv.) C.V.Morton	Chase 3308
Elaphoglossum lastii (Baker) C.Chr.	Chase 118
Elaphoglossum macropodium (Fée) T.Moore	Chase 2194
Elaphoglossum spathulatum (Bory) T.Moore var. *spathulatum*	Burrows 2376
Lycopodiaceae	
Huperzia dacrydioides (Baker) Pic.Serm.	Chase 1121
Huperzia ophioglossoides (Lam.) Rothm.	Chase 1137

Name / authority	Voucher
Huperzia verticillata (L.f.) Trevis.	Chase 3140
Lycopodiella cernua (L.) Pic.Serm.	Ballings & Wursten 20
Lycopodium clavatum L.	FoZ #4033
Lygodiaceae	
Lygodium kerstenii Kuhn	Chase 2024
Marattiaceae	
Ptisana fraxinea (Sm.) Murdock var. *salicifolia* (Schrad.) Murdock	Ballings & Wursten 31
Nephrolepidaceae	
Nephrolepis undulata (Sw.) J.Sm.	Chase 3307
Oleandraceae	
Oleandra distenta Kunze	Chase 3389
Ophioglossaceae	
Ophioglossum gomezianum A.Braun	Burrows & Burrows 5193
Ophioglossum polyphyllum A.Braun var. *polyphyllum*	Ballings & Wursten s.r.
Ophioglossum reticulatum L.	Ballings & Wursten 131
Osmundaceae	
Osmunda regalis L.	Chase 7139
Polypodiaceae	
Belvisia spicata (L.f.) Copel.	Burrows 2380
Lepisorus excavatus (Willd.) Ching	Ballings & Wursten 10
Lepisorus schraderi (Mett.) Ching	Ballings & Wursten 14
Loxogramme abyssinica (Baker) M.G.Price	Ballings & Wursten 15
Microgramma mauritiana (Willd.) Tardieu	Wild & Chase 78
Microsorum pappei (Kuhn) Tardieu	Chase 7113
Pleopeltis macrocarpa (Willd.) Kaulf.	Ballings & Wursten 18
Pleopeltis polypodioides (L.) E.G.Andrews & Windham subsp. *ecklonii* (Kunze) J.P.Roux	Ballings & Wursten 80
Pyrrosia rhodesiana (C.Chr.) Schelpe	Chase 1038
Pyrrosia schimperiana (Kuhn) Alston var. *schimperiana*	Wursten & Ballings 81
Pteridaceae	
Actiniopteris dimorpha Pic.Serm. subsp. *dimorpha*	Chase 7578
Actiniopteris radiata (Sw.) Link	Chase 5576
Adiantum capillus-veneris L.	Ballings & Wursten 1431
Adiantum poiretii Wikstr.	Chase 4630
**Adiantum raddianum* C.Presl	Chase 4688
Pityrogramma argentea (Willd.) Domin	Chase 3173
Pteris catoptera Kunze	Ballings & Wursten 114
Pteris cretica L.	Chase 3525
Pteris dentata Forssk.	Fisher 1547
Pteris friesii Hieron.	Ballings & Wursten 78
Pteris vittata L.	Ballings & Wursten 83
Vittaria guineensis Desv. var. *orientalis* Hieron.	Chase 6641
Vittaria isoetifolia Bory	Fisher 1549
Vittaria volkensii Hieron.	Ballings & Wursten 144
Selaginellaceae	
Selaginella dregei (C.Presl) Hieron.	Chase 1126
Selaginella kraussiana (Kunze) A.Braun	Chase 4035
Selaginella mittenii Baker	Chase 5622
Sinopteridaceae	
Cheilanthes bergiana Schltdl.	Chase 4591
Cheilanthes buchananii (Baker) Domin	Burrows 2324
Cheilanthes involuta (Sw.) Schelpe & N.C.Anthony var. *obscura* (N.C.Anthony) N.C.Anthony	Chase 3469
Cheilanthes leachii (Schelpe) Schelpe	Ballings & Wursten 67
Cheilanthes multifida N.C.Anthony & Schelpe	Chase 3979
Cheilanthes quadripinnata (Forssk.) Kuhn	Chase 4010
Cheilanthes viridis (Forssk.) Sw. var. *glauca* (Sim) Schelpe & N.C.Anthony	Ballings & Wursten 68
Cheilanthes viridis (Forssk.) Sw. var. *viridis*	Chase 7141a
Pellaea calomelanos (Sw.) Link var. *calomelanos*	Ballings & Wursten 64
Pellaea calomelanos (Sw.) Link var. *swynnertoniana* (Sim) Schelpe	Chase 4413
Pellaea doniana Hook.	Chase 2028
Pellaea dura (Willd.) Hook. var. *dura*	Chase 5591
Pellaea pectiniformis Baker	Chase 4412
Tectariaceae	
Arthropteris monocarpa (Cordem.) C.Chr.	Chase 3506
Arthropteris orientalis (J.F.Gmel.) Posth. var. *orientalis*	Chase 2007
Tectaria gemmifera (Feé) Alston	Chase 3519

Name / authority	Voucher
Thelypteridaceae	
Amauropelta bergiana (Schltdl.) Holltum var. *bergiana*	Ballings & Wursten 29
Christella dentata (Forssk.) Brownsey & Jermy	Burrows 1636
Christella gueinziana (Mett.) Holttum	Chase 3377
Cyclosorus interruptus (Willd.) H.Itô	Ballings & Wursten 82
Pneumatopteris unita (Kunze) Holttum	Ballings & Wursten 21
Pseudocyclosorus pulcher (Willd.) Holttum	Chase 6698
Thelypteris confluens (Thunb.) Morton	Ballings & Wursten 23
GYMNOSPERMAE	
Pinaceae	
**Pinus patula* Schltdl.& Cham.	FoZ #3770
Podocarpaceae	
Podocarpus milanjianus Rendle	Chase 5477
MONOCOTYLEDONS	
Agavaceae	
**Furcraea foetida* (L.) Haw.	FoZ #40164
Amaryllidaceae	
Boophone disticha (L.f.) Herb.	FoZ #353
Crinum macowanii Baker	FoZ #356
Cryptostephanus vansonii I.Verd.	Bamps 711
Cyrtanthus galpinii Baker	FoZ #359
**Nothoscordum borbonicum* Kunth	FoZ #15
Tulbaghia alliacea (L.f.) Thunb.	Chase 4187
Anthericaceae	
Chlorophytum andongense Baker	Chase 7321
Chlorophytum bowkeri Baker	FoZ #4051
Chlorophytum comosum (Thunb.) Jacq.	Jacobsen 3051
Chlorophytum gallabatense Baker	Wild 5570
Chlorophytum galpinii (Baker) Kativu	FoZ #32168
Chlorophytum macrosporum Baker	Chase 1452
Araceae	
Zantedeschia albomaculata (Hook.) Baill. subsp. *albomaculata*	FoZ #34616
Arecaceae	
Phoenix reclinata Jacq.	FoZ #15154
Asparagaceae	
Asparagus africanus Lam.	Ferrar 4084
Asparagus asparagoides (L.) Wight	FoZ #2885
Asparagus falcatus L. var. *falcatus*	FoZ #2698
Asparagus laricinus Burch.	FoZ #249
Asparagus setaceus (Kunth) Jessop	Chase 1623
Asparagus virgatus Baker	Müller 3374
Asphodelaceae	
Aloe arborescens Mill.	FoZ #6111
Aloe cameronii Hemsl. var. *bondana* Reynolds **NE**	Christian 450
Aloe excelsa A.Berger var. *excelsa*	FoZ #3451
Aloe inyangensis Christian var. *kimberleyana* S.Carter **NE**	Plowes 2021
Aloe pretoriensis Pole-Evans	Chase 5603
Aloe rhodesiana Rendle	FoZ #3817
Aloe swynnertonii Rendle	FoZ #3458
Bulbine latifolia (L.f.) Roem.& Schult.f.	FoZ #6231
Kniphofia linearifolia Baker	FoZ #633
Behniaceae	
Behnia reticulata (Thunb.) Didr.	Grosvenor 267
Colchicaceae	
Androcymbium striatum A.Rich.	FoZ #529
Gloriosa superba L.	FoZ #1046
Commelinaceae	
Aneilema aequinoctiale (P.Beauv.) Loudon	FoZ #37419
Aneilema welwitschii C.B.Clarke	Bamps 684
Commelina africana L.	FoZ #33055
Commelina welwitschii C.B.Clarke	FoZ #33108
Cyanotis speciosa (L.f.) Hassk. subsp. *speciosa*	Chase 609
**Gibasis pellucida* (M.Martens & Galeotti) Hunt	FoZ #18940
Murdannia simplex (Vahl) Brenan	Hopkins 7097
**Tradescantia fluminensis* Vell.	FoZ #36272

Name / authority	Voucher
**Tradescantia zebrina* Bosse	FoZ #40886
Cyperaceae	
Bulbostylis burchellii (Ficalho & Hiern) C.B.Clarke	Jacobsen 3126
Bulbostylis hispidula (Vahl) R.W.Haines	Browning 566
Bulbostylis schoenoides (Kunth) C.B.Clarke	FoZ #14528
Carex spicato-paniculata C.B.Clarke	Chase 7425
Coleochloa setifera (Ridl.) Gilly	Bamps 606
Costularia natalensis C.B.Clarke	Fisher 1643
Cyperus albostriatus Schrad.	Chase 8114
Cyperus amabilis Vahl	Browning 576
Cyperus cuspidatus Kunth	Browning 554
Cyperus cyperoides (L.) Kuntze	FoZ #15126
Cyperus denudatus L.f. var. *denudatus*	Browning 281
Cyperus distans L.f.	Jacobsen 3028
Cyperus hemisphaericus Boeck.	FoZ #5797
Cyperus involucratus Rottb.	Loveridge 1094
Cyperus pseudoleptocladus Kük.	Jacobsen 3026
Cyperus pseudovestitus (C.B. Clarke) Kük.	Chase 5561
Cyperus rigidifolius Steud.	Jacobsen 3023
Cyperus tenuispica Steud.	Browning 555
Cyperus zambesiensis C.B.Clarke	Müller 3487
Fuirena stricta Steud. var. *stricta*	Browning 574
Kyllinga crassipes Boeck.	Jacobsen 3024
Kyllinga odorata Vahl	Jacobsen 3025
*Kyllinga sp.*cf. erecta Schumach.& Thonn.	Hyde s.r.
Kyllinga squamulata Vahl	FoZ #6523
Lipocarpha nana (A.Rich.) Cherm.	Browning 550
Mariscus albopilosus C.B.Clarke	Jacobsen 3047
Mariscus hemisphaericus (Boeck.) C.B.Clarke	Jacobsen 3027
Pycreus pelophilus (Ridl.) C.B.Clarke	Browning 556
Dioscoreaceae	
Dioscorea dumetorum (Kunth) Pax	FoZ #19137
Dioscorea schimperiana Kunth	Müller 3376
Dioscorea sylvatica Eckl.	FoZ #19141
Dracaenaceae	
Dracaena fragrans (L.) Ker-Gawl.	Chase 1440
Dracaena mannii Baker	Chase 875
Dracaena steudneri Engl.	Müller plot 76
Eriocaulaceae	
Eriocaulon inyangense Arw.	Wild 5540
Eriospermaceae	
Eriospermum mackenii (Hook.f.) Baker subsp. *mackenii*	Ferrar s.n.
Hyacinthaceae	
Albuca kirkii (Baker) Brenan	Ferrar 4040
Bowiea volubilis Hook.f.	Chase 362
Drimia elata Jacq.	FoZ #7512
Eucomis autumnalis (Mill.) Chitt. subsp. *autumnalis* (=*E. zambesiaca* Baker)	Plowes 2240
Ledebouria unidentified sp.no.1.	FoZ #41510
Litanthus pusillus Harv. (=*Drimia uniflora* J.C.Manning & Goldblatt)	FoZ #69141
Stellarioides tenuifolia (F.Delaroche) Speta subsp. *tenuifolia* (=*Ornithogalum tenuifolium* F.Delaroche)	FoZ #863
Hydrocharitaceae	
Lagarosiphon major (Ridl.) Moss	Whellan 1561
Hypoxidaceae	
Hypoxis galpinii Baker	FoZ #15385
Hypoxis nyasica Baker	FoZ #53770
Hypoxis rigidula Baker	Zimudzi 57
Iridaceae	
Anomatheca grandiflora Baker (=*Freesia grandiflora* (Baker) Klatt)	FoZ #5749
Aristea abyssinica Pax	FoZ #791
Aristea angolensis Baker	Garley 119
Aristea ecklonii Baker	Chase 63
Aristea woodii N.E.Br.	Wild 2845
Crocosmia aurea (Hook.) Planch. subsp. *aurea*	Chase 5488
Crocosmia paniculata (Klatt) Goldblatt	Chase 6315
Dierama formosum Hilliard	Chase 6023

Name / authority	Voucher
Dietes iridioides (L.) Klatt	Biegel 2422
Gladiolus crassifolius Baker	Plowes 2020
Gladiolus dalenii Van Geel subsp. *dalenii*	FoZ #796
Gladiolus flavoviridis Goldblatt	FoZ #35667
Hesperantha petitiana (A.Rich.) Baker	Chase 6036
Moraea spathulata (L.f.) Klatt	FoZ #2397
Juncaceae	
Juncus oxycarpus Kunth	FoZ #40749
Liliaceae	
**Lilium formosanum* (Baker) Wallace	FoZ #674
Musaceae	
Ensete ventricosum (Welw.) Cheesman	FoZ #1060
Orchidaceae	
Aerangis kotschyana (Rchb.f.) Schltr.	Chase 7083
Aerangis mystacidii (Rchb.f.) Schltr.	Chase 5574
Aeranthes africana J.L.Stewart **E**	Ball 1283
Angraecopsis amaniensis Summerh.	FoZ #1000
Angraecopsis parviflora (Thouars) Schltr.	FoZ #34512
Angraecum chamaeanthus Schltr.	FoZ #991
Angraecum conchiferum Lindl.	Chase 44
Angraecum minus Summerh.	Chase 5997
Angraecum sacciferum Lindl.	Ferrar 3979
Angraecum stella-africae P.J.Cribb	FoZ #995
Bolusiella iridifolia (Rolfe) Schltr. subsp. *picea* P.J.Cribb	Wild 2803
Bonatea steudneri (Rchb.f.) T.Durand & Schinz	Ball 443
Brachycorythis lastii Rolfe	FoZ #4871
Brachycorythis ovata Lindl. subsp. *welwitschii* (Rchb.f.) Summerh.	Chase 4213
Brachycorythis pleistophylla Rchb.f. subsp. *pleistophylla*	Chase 5548
Brownleea maculata P.J.Cribb	Chase 217
Brownleea parviflora Lindl.	Chase 6013
Bulbophyllum ballii P.J.Cribb	Chase 6170
Bulbophyllum elliotii Rolfe	Wild 2808
Bulbophyllum fuscum Lindl. var. *melinostachyum* (Schltr.) J.J.Verm.	Wild 2813
Bulbophyllum josephii (Kuntze) Summerh.	Wild 2804
Bulbophyllum longiflorum Thouars	Ball 1378
Bulbophyllum maximum (Lindl.) Rchb.f.	Chase 992
Bulbophyllum sandersonii (Hook.f.) Rchb.f. subsp. *sandersonii*	Wild 5544
Bulbophyllum scaberulum (Rolfe) Bolus	FoZ #1017
Bulbophyllum unifoliatum De Wild. var. *infracarinatum* (G.Will.) J.J.Verm.	FoZ #1019
Calanthe sylvatica (Thouars) Lindl.	Chase 7333
Cynorkis anacamptoides Kraenzl. var. *anacamptoides*	FoZ #34629
Cynorkis debilis (Hook.f.) Summerh. (=*C. hanningtonii* Rolfe)	Chase 5541
Cynorkis kassneriana Kraenzl.	Wild 2798
Cynorkis kirkii Rolfe	FoZ #99847
Cyrtorchis arcuata (Lindl.) Schltr. subsp. *arcuata*	Ball 1423
Cyrtorchis praetermissa Summerh. subsp. *praetermissa*	FoZ #33087
Cyrtorchis ringens (Rchb.f.) Summerh.	FoZ #2478
Diaphananthe fragrantissima (Rchb.f.) Schltr.	FoZ #21698
Diaphananthe rutila (Rchb.f.) Summerh.	Wild 6446
Diaphananthe stolzii Schltr.	Ball 1303
Diaphananthe subsimplex Summerh.	Ball 1406
Diaphananthe xanthopollinia (Rchb.f.) Summerh.	Ball 1236
Disa aconitoides Sond. subsp. *concinna* (N.E.Br.) H.P.Linder	Chase 6268
Disa fragrans Schltr. subsp. *fragrans*	Chase 4065
Disperis anthoceros Rchb.f.	Wild 2816
Disperis dicerochila Summerh.	FoZ #2374
Disperis lindleyana Rchb.f.	Chase 7030
Disperis virginalis Schltr.	Wild 2810
Eulophia callichroma Rchb.f.	Symoens et al. 669
Eulophia cucullata (Sw.) Steud.	FoZ #4873
Eulophia eylesii Summerh.	Chase 5562
Eulophia fridericii (Rchb.f.) A.V.Hall	Ball 440
Eulophia gonychila Schltr.	Chase 5572
Eulophia hians Spreng. var. *hians*	FoZ #21961
Eulophia horsfallii (Bateman) Summerh.	Ball 5256

Name / authority	Voucher
Eulophia norlindhii Summerh.	Wild s.n.
Eulophia nyasae Rendle	Ball 717
Eulophia parviflora (Lindl.) A.V.Hall	Chase 3075
Eulophia petersii (Rchb.f.) Rchb.f.	Chase 51
Eulophia rolfeana Kraenzl. (=*E. williamsonii* P.J.Cribb)	Beasley 121
Eulophia speciosa (Lindl.) Bolus	Chase 4180
Eulophia streptopetala Lindl.	FoZ #3623
Eulophia tenella Rchb.f.	Wild 6746
Eulophia venulosa Rchb.f.	Ball 586
Habenaria amoena Summerh.	Ballings s.r.
Habenaria armatissima Rchb.f.	Ball 442
Habenaria cornuta Lindl.	Ball 522
Habenaria galpinii Bolus	Ball 528
Habenaria macrostele Summerh.	Chase 6050
Habenaria malacophylla Rchb.f.	Chase 4403
Habenaria nyikana Rchb.f. subsp. *nyikana*	FoZ #7002
Habenaria praestans Rendle var. *praestans*	Chase 206
Habenaria rautaneniana Kraenzl.	Chase 6348
Habenaria silvatica Schltr.	Chase 6334
Habenaria subaequalis Summerh.	Wild 2806
Jumellea walleri (Rolfe) la Croix	Wild 3223
Liparis bowkeri Harv.	Grosvenor 784
Liparis mulindana Schltr.	Ball 1267
Liparis nervosa (Thunb.) Lindl.	FoZ #1411
Malaxis weberbaueriana (Kraenzl.) Summerh. (=*M. stolzii* (Schltr.) Summerh.)	Chase 6363
Microcoelia exilis Lindl.	Ferrar s.n.
Microcoelia globulosa (Ridl.) L.Jonss.	FoZ #5781
Microcoelia stolzii (Schltr.) Summerh.	Ball 1392
Mystacidium tanganyikense Summerh. (incl. *M. pusillum* sensu Wild 6442)	FoZ #2455
Nervilia ballii G.Will.	Ball 585
Nervilia crociformis (Zoll.& Moritzi) Seidenf.	Ball 1407
Nervilia kotschyi (Rchb.f.) Schltr. var. *purpurata* (Rchb.f.& Sond.) Börge Pett.	Ball 511
Nervilia pectinata P.J.Cribb	Ball 410
Nervilia shirensis (Rolfe) Schltr.	Chase 6235
Orthochilus eustachyus (Rchb.f.) Bytebier	FoZ #2854
Orthochilus mechowii Rchb.f.	FoZ #102482
Orthochilus milnei (Rchb.f.) Bytebier (=*Eulophia milnei* Rchb.f.)	Jacobsen 3030
Orthochilus odontoglossus (Rchb.f.) Bytebier	FoZ #37451
Platycoryne pervillei Rchb.f.	FoZ #4075
Polystachya adansoniae Rchb.f.	Chase 5609
Polystachya albescens Ridl. subsp. *imbricata* (Rolfe) Summerh.	Drummond 5097
Polystachya caespitifica Engl. subsp. *hollandii* (Bolus) P.J.Cribb & Podz.	FoZ #36207
Polystachya campyloglossa Rolfe [incl. *P. ottoniana* sensu Ball 1282, Chase 86]	Ball 1282
Polystachya concreta (Jacq.) Garay & H.R.Sweet (=*P. tessellata* Lindl.)	Chase 4400
Polystachya cultriformis (Thouars) Spreng.	Grosvenor 659
Polystachya fusiformis (Thouars) Lindl.	FoZ #1659
Polystachya golungensis Rchb.f.	Ball 1329
Polystachya modesta Rchb.f.	FoZ #15642
Polystachya simplex Rendle	Ball 1377
Polystachya stuhlmannii Kraenzl.	Philcox et al. 8959
Polystachya subumbellata P.J.Cribb & Podz.	Wild 6445
Polystachya transvaalensis Schltr.	FoZ #1667
Polystachya vaginata Summerh.	Wild 2977
Polystachya zambesiaca Rolfe	Ball 1364
Rangaeris muscicola (Rchb.f.) Summerh.	Plowes 2893
Satyrium anomalum Schltr.	FoZ #1415
Satyrium chlorocorys Rolfe	Chase 6014
Satyrium longicauda Lindl.	Hopkins 7077
Satyrium trinerve Lindl.	FoZ #34622
Solenangis conica (Schltr.) L.Jonss.	FoZ #3052
Stenoglottis woodii Schltr.	Woodburn 30b
Stenoglottis zambesiaca Rolfe (incl. *S. fimbriata* sensu Summerh.)	Chase 6018
Stolzia repens (Rolfe) Summerh. var. *obtusa* G.Will.	Ball 1398
Stolzia repens (Rolfe) Summerh. var. *repens*	Wild 2811
Taeniophyllum coxii (Summerh.) Summerh.	FoZ #64342

Name / authority	Voucher
Tridactyle anthomaniaca (Rchb.f.) Summerh.	Grosvenor 862
Tridactyle bicaudata (Lindl.) Schltr.	Plowes 2892
Tridactyle inaequilonga (De Wild.) Schltr.	Obermeyer 2087
Tridactyle tricuspis (Bolus) Schltr.	Chase 6101
Tridactyle tridactylites (Rolfe) Schltr.	Ball 160
Tridactyle tridentata (Harv.) Schltr.	FoZ #15348
Vanilla polylepis Summerh.	Plowes 2667
Ypsilopus erectus (P.J.Cribb) P.J.Cribb & J.L.Stewart	Ball 1315
Poaceae	
Agrostis lachnantha Nees	Corby 244
Andropogon eucomus Nees subsp. *eucomus*	FoZ #15338
Andropogon eucomus Nees subsp. *huillensis* (Rendle) Sales	Hyde s.r.
Andropogon schirensis A.Rich.	Pope et al. 6608
Arthraxon lancifolius (Trin.) Hochst.	Chase 7096
Bewsia biflora (Hack.) Gooss.	Pope et al 6606
Brachypodium flexum Nees	Hyde 97
**Briza maxima* L.	FoZ #93
**Briza minor* L.	FoZ #95
**Bromus catharticus* Vahl	Hyde 297
**Cenchrus clandestinus* (Chiov.) Morrone (=*Pennisteum clandestinum* Chiov.)	FoZ #4006
Coelachne africana Pilg.	Biegel 2427
Craspedorhachis africana Benth.	Runhaar 844
Cymbopogon nardus (L.) Rendle	Runhaar 77
Cynodon dactylon (L.) Pers.	Hyde s.r.
Digitaria diagonalis (Nees) Stapf	Rattray 1460
Digitaria eriantha Steud.	Cleghorn 1360
Digitaria gazensis Rendle	Hyde s.r.
Digitaria maitlandii Stapf & C.E.Hubb.	Fisher 1127
Digitaria scalarum (Schweinf.) Chiov.	Allison s.n.
Diheteropogon amplectens (Nees) Clayton var. *catangensis* (Chiov.) Clayton	FoZ #15215
Ehrharta erecta Lam.	Corby 247
Eleusine africana Kenn.-O'Byrne	FoZ #16428
Elionurus muticus (Spreng.) Kuntze	Corby 249
Eragrostis acraea De Winter	Crook P70
Eragrostis capensis (Thunb.) Trin.	Runhaar 840
Eragrostis chapelieri (Kunth) Nees	Fisher 220
Eragrostis cilianensis (All.) Janch.	Crook 1050
Eragrostis congesta Oliv.	Corby 262
Eragrostis hispida K.Schum.	FoZ #15208
Eragrostis patens Oliv.	Runhaar 761
Eragrostis plana Nees	Wild 2
Eragrostis racemosa (Thunb.) Steud.	Corby 261
Eragrostis sclerantha Nees subsp. *villosipes* (Jedwabn.) Launert	Runhaar 757
Eragrostis tenuifolia (A.Rich.) Steud.	FoZ #15225
Heteropogon contortus (L.) Roem.& Schult.	Hyde s.r.
Hyparrhenia anamesa Clayton	Hyde 345
Hyparrhenia cymbaria (L.) Stapf	Hyde 350
Hyparrhenia filipendula (Hochst.) Stapf	Hyde s.r.
Hyparrhenia newtonii (Hack.) Stapf var. *macra* Stapf	Corby 246
Hyparrhenia newtonii (Hack.) Stapf var. *newtonii*	Runhaar 762
Hyparrhenia nyassae (Rendle) Stapf	Runhaar 764
Imperata cylindrica (L.) Raeusch.	FoZ #37404
Isachne mauritiana Kunth	Crook 2016
Ischaemum fasciculatum Brongn.	Runhaar 767
Koeleria capensis (Steud.) Nees	Corby 268
**Lolium multiflorum* Lam.	Corby 269
Loudetia flavida (Stapf) C.E.Hubb.	Rattray 1457
Loudetia simplex (Nees) C.E.Hubb.	FoZ #16425
Melinis ambigua Hack. subsp. *ambigua*	Runhaar 838
Melinis minutiflora P.Beauv.	Fisher 1596
Melinis nerviglumis (Franch.) Zizka	Hyde 295
Melinis repens (Willd.) Zizka subsp. *grandiflora* (Hochst.) Zizka	Schweickert 227
Microchloa caffra Nees	Corby 264
Monocymbium ceresiiforme (Nees) Stapf	Hyde 72
Olyra latifolia L.	Müller 3381

Name / authority	Voucher
Oplismenus burmannii (Retz.) P.Beauv.	Pope 3728
Oplismenus compositus (L.) P.Beauv.	Müller 3047
Oplismenus hirtellus (L.) P.Beauv.	Rattray 1449
Oplismenus undulatifolius (Ard.) Roem.& Schult.	Runhaar 752a
Oxytenanthera abyssinica (A.Rich.) Munro	Chase 2172
Panicum inaequilatum Stapf & C.E.Hubb.	Crook 2020
Panicum laticomum Nees	Müller s.n.
Panicum maximum Jacq.	Rattray 1458
Panicum monticola Hook.f.	Runhaar 755
Panicum wiehei Renvoize	Drummond 5094
**Paspalum dilatatum* Poir.	Hyde s.r.
Paspalum scrobiculatum L.	FoZ #15125
**Paspalum urvillei* Steud.	FoZ #2054
Perotis patens Gand.	Wild 5
**Poa annua* L.	Hyde 103
Poecilostachys oplismenoides (Hack.) Clayton (=*Chloachne oplismenoides* (Hack.) Robyns)	Chase 1144
Pogonarthria squarrosa (Roem.& Schult.) Pilg.	Hyde s.r.
Pseudechinolaena polystachya (Kunth) Stapf	Runhaar 842
Rhytachne rottboellioides Desv.	Hyde s.r.
Sacciolepis typhura (Stapf) Stapf	Chase 7836
Schizachyrium sanguineum (Retz.) Alston	Pope 6607
Setaria homonyma (Steud.) Chiov.	FoZ #33050
Setaria megaphylla (Steud.) T.Durand & Schinz	Müller 3078
Setaria sphacelata (Schumach.) Moss	Wild 1
Setaria verticillata (L.) P.Beauv.	FoZ #2086
Sporobolus acinifolius Stapf	Hyde 94
Sporobolus molleri Hack.	Hyde s.r.
Sporobolus piliferus (Trin.) Kunth	Hyde s.r.
Sporobolus pyramidalis P.Beauv.	FoZ #15122
Sporobolus sanguineus Rendle	Hyde 135
Stereochlaena cameronii (Stapf) Pilg.	Hyde s.r.
Streblochaete longiarista (A.Rich.) Pilg.	Müller 3377
Themeda triandra Forssk.	FoZ #15216
Tragus berteronianus Schult.	Crook 1052
Tricholaena monachne (Trin.) Stapf & C.E.Hubb.	FoZ #15211
Tristachya nodiglumis K.Schum.	Chase 7835
Urochloa oligotricha (Fig.& De Not.) Henrard	Sheppard 43
Potamogetonaceae	
Potamogeton nodosus Poir.	FoZ #7454
Potamogeton octandrus Poir.	Chase 5981
Potamogeton pusillus L.	Denny 1315
Smilaceae	
Smilax anceps Willd.	Wild 496
Strelitziaceae	
Strelitzia caudata R.A.Dyer	FoZ #1208
Typhaceae	
Typha capensis (Rohrb.) N.E.Br.	FoZ #99860
Velloziaceae	
Xerophyta sp.	Hyde s.r.
Xyridaceae	
Xyris obscura N.E.Br.	Chase 6027
Zingiberaceae	
Aframomum albiflorum Lock	FoZ #39633
Aframomum angustifolium (Sonn.) K.Schum.	FoZ #34511
**Hedychium gardnerianum* Ker Gawl.	FoZ #294
Siphonochilus aethiopicus (Schweinf.) B.L.Burtt	Eyles 6962
DICOTYLEDONS	
Acanthaceae	
Anisotes pubinervis (T.Anderson) Heine (=*Metarungia pubinervia* (T.Anderson) C.B.Clarke)	Chase 8161
Asystasia gangetica (L.) T.Anderson subsp. *micrantha* (Nees) Ensermu	Chase 2154
Barleria aromatica Oberm.	Hopkins 8049
Barleria fissimuroides I.Darbysh. **NE**	Chase s.n.
Barleria spinulosa Klotzsch subsp. *kirkii* (T.Anderson) I.Darbysh.	Chase 6495
Barleria ventricosa Nees	FoZ #24678
Brillantaisia cicatricosa Lindau (=*B. ulugurica* Lindau)	Chase 854

Name / authority	Voucher
Dicliptera clinopodia Nees	FoZ #1238
Dicliptera extenta S.Moore	Müller 3042
Dyschoriste nagchana (Nees) Bennet	FoZ #33058
Dyschoriste trichocalyx (Oliv.) Lindau subsp. *verticillaris* (C.B.Clarke) Vollesen (=*D. verticillaris* C.B.Clarke)	Carter 2123
Hypoestes aristata (Vahl) Roem.& Schult.	Carter 2119
Hypoestes forskaolii (Vahl) Roem.& Schult. subsp. *forskaolii*	Chase 6493
**Hypoestes phyllostachya* Baker	FoZ #36366
Isoglossa gregorii (S.Moore) Lindau	Müller 3404
Isoglossa milanjiensis S.Moore (=*I. mossambicensis* Lindau)	Chase 7104
Justicia betonica L.	Chase 2159
Justicia bracteata (Hochst.) Zarb (=*Monochema debile* (Forssk.) Nees)	Chase 4557
Justicia matammensis (Schweinf.) Oliv.	Wild 2838
Justicia nyassana Lindau	Chase 5578
Justicia phyllostachys C.B.Clarke	FoZ #15150
Justicia striata (Klotzsch) Bullock	FoZ #28977
Mellera lobulata S.Moore	Chase 5721
Mimulopsis solmsii Schweinf.	FoZ #1616
Phaulopsis imbricata (Forssk.) Sweet subsp. *imbricata*	Chase 786
Pseuderanthemum subviscosum (C.B.Clarke) Stapf	Chase 1785
Ruellia cordata Thunb.	FoZ #33086
Sclerochiton harveyanus Nees	Hopkins 7093
Thunbergia alata Sims	Obermeyer 2141
Thunbergia natalensis Hook.	Biegel 2421
Thunbergia oblongifolia Oliv. (incl. *T. lancifolia* sensu Mapaura & Timberlake)	FoZ #3602, Chase 4689
Thunbergia petersiana Lindau	Grosvenor 783
Thunbergia usambarica Lindau	FoZ #228
Achariaceae	
Kiggelaria africana L.	Chase 7797
Rawsonia lucida Harv.& Sond.	Fisher 1513
Amaranthaceae	
**Achyranthes aspera* L. var. *pubescens* (Moq.) C.C.Towns.	Müller 3090
**Achyranthes aspera* L. var. *sicula* L.	Chase 2151
**Alternanthera caracasana* Kunth	FoZ #15032
**Amaranthus hybridus* L.	FoZ #37392
Amaranthus lividus L. subsp. *polygonoides* (Moq.) Probst	FoZ #15033
Centemopsis gracilenta (Hiern) Schinz	FoZ #4876
**Chenopodium ambrosioides* L.	FoZ #41453
**Chenopodium album* L.	FoZ #25901
Cyathula cylindrica Moq.	Schelpe 363
Cyathula uncinulata (Schrad.) Schinz	FoZ #301
**Gomphrena celosioides* Mart.	FoZ #33043
Anacardiaceae	
Lannea edulis (Sond.) Engl. var. *edulis*	FoZ #15148
**Mangifera indica* L.	FoZ #3612
Searsia chirindensis (Baker f.) Moffett (=*Rhus chirindensis* Baker f.)	Müller 3596
Searsia dentata (Thunb.) F.A.Barkley (=*Rhus dentata* Thunb.)	Müller 806
Searsia longipes (Engl.) Moffett var. longipes (=*Rhus longipes* Engl. var. *longipes*)	Loveridge 1090
Searsia lucida (L.) F.A.Barkley (=*Rhus lucida* L.)	Chase 7358
Searsia natalensis (C.Krauss) F.A.Barkley (=*Rhus natalensis* C.Krauss)	Müller 3619
Searsia tomentosa (L.) F.A.Barkley (=*Rhus tomentosa* L.)	FoZ #26271
Annonaceae	
Annona senegalensis Pers. subsp. *senegalensis*	FoZ #15212
Artabotrys monteiroae Oliv.	Chase 5822
Monanthotaxis chasei (N.Robson) Verdc.	Müller 3075
Uvaria lucida Benth. subsp. *virens* (N.E.Br.) Verdc.	Müller 3094
Xylopia parviflora (A.Rich.) Benth.	Müller 3618
Aphloiaceae	
Aphloia theiformis (Vahl) Benn.	Chase 517
Apiaceae	
Alepidea peduncularis A.Rich.	FoZ #7647
**Apium leptophyllum* (Pers.) Benth.	FoZ #98903
Centella asiatica (L.) Urb.	FoZ #24588
Centella virgata (L.f.) Drude var. *gracilescens* Domin	Chase 6116
Diplolophium buchananii (Oliv.) C.Norman subsp. *swynnertonii* (Baker f.) Cannon	Symoens et al. 667

Name / authority	Voucher
Heteromorpha arborescens (Spreng.) Cham.& Schltdl. var. *abyssinica* (A.Rich.) H.Wolff	Chase 4417
Heteromorpha arborescens (Spreng.) Cham.& Schltdl. var. *montana* P.J.D.Winter	FoZ #35269
Hydrocotyle mannii Hook.f.	Wild 2840
Pimpinella caffra (Eckl.& Zeyh.) D.Dietr.	Chase 6032
Sanicula elata D.Don	FoZ #23850
Steganotaenia araliacea Hochst. var. *araliacea*	FoZ #33124
Apocynaceae	
Asclepias cucullata (Schltr.) Schltr. subsp. *scabrifolia* (S.Moore) Goyder	Wursten & Ballings 211
Carissa bispinosa (L.) Brenan subsp. *zambesiensis* Kupicha	Chase 7018
Carissa spinarum L. (=*C. edulis* (Forssk.) Vahl)	FoZ #98852
Ceropegia abyssinica Decne.	Chase 5535
Ceropegia lugardae N.E.Br.	Chase 1234
Cryptolepis oblongifolia Schltr.	FoZ #31948
Cynanchum umtalense Liede (=*Cynanchum* sp. no.1)	Chase 6465
Glossostelma carsonii (N.E.Br.) Bullock	Chase 66
Huernia hislopii Turrill subsp. *hislopii*	Wild 2805
Landolphia buchananii (Hallier f.) Stapf	Chase 4594
Landolphia kirkii Hook.f.	FoZ #33147
Margaretta rosea Oliv. subsp. *whytei* (K.Schum.) M.Mwanyambo	FoZ #15142
Mondia whitei (Hook.f.) Skeels	FoZ #2472
Pachycarpus chirindensis (S.Moore) Goyder	Obermeyer 2113
Rauvolfia caffra Sond.	Bamps 587
Secamone alpini Schult.	Pole Evans 5114
Sphaerocodon caffrum (Meisn.) Schltr.	Chase 5563
Strophanthus speciosus (Ward & Harv.) Reber	FoZ #2873
Tabernaemontana stapfiana Britten	Biegel 2418
Tabernaemontana ventricosa A.DC.	Drummond 5082
Tylophora anomala N.E.Br. (=*Cynanchum chirindense* S.Moore)	FoZ #28705
Tylophora sp.no. 2 cf. *tenuipedunculata* (Müller 2841)	Harder 3817
Aquifoliaceae	
Ilex mitis (L.) Radlk. var. *mitis*	Chase 3084
Araliaceae	
Cussonia arborea A.Rich.	Bamps 634
Cussonia spicata Thunb.	FoZ #1163
Polyscias fulva (Hiern) Harms	Chase 1971
Schefflera goetzenii Harms	Wild 2837
Schefflera umbellifera (Sond.) Baill.	Chase 5591
Aristolochiaceae	
Aristolochia albida Duch.	Pole Evans 4822
Asteraceae	
**Acanthospermum australe* (Loefl.) Kuntze	FoZ #433
Adenostemma mauritianum DC.	Müller 1950
**Ageratum conyzoides* L.	FoZ #3545
**Ageratum houstonianum* Mill.	FoZ #435
Anisopappus chinensis (L.) Hook.f.& Arn. subsp. *chinensis* var. *dentatus* (DC.) S.Ortíz, Paiva & Rodr.Oubiña	Chase 5581
Anisopappus kirkii (Oliv.) Brenan	Schelpe 378
Aspilia mossambicensis (Oliv.) Wild	FoZ #4882
Aspilia pluriseta Schweinf. subsp. *pluriseta*	Bamps et al. 640
Athrixia rosmarinifolia (Walp.) Oliv.& Hiern var. *rosmarinifolia*	Loveridge 1089
Berkheya setifera DC.	FoZ #39978
Berkheya zeyheri (Sond.& Harv.) Oliv.& Hiern	FoZ #3926
**Bidens biternata* (Lour.) Merr.& Sherff	Chase 2153
**Bidens pilosa* L.	FoZ #443
Bothriocline inyangana N.E.Br. var. *inyangana*	Hopkins 6935
**Centratherum punctatum* Cass. subsp. *punctatum*	FoZ #6295
Chrysanthemoides monilifera (L.) Norl. subsp. *septentrionale* Norl.	FoZ #3596
Cineraria deltoidea Sond.	Chase 7787
Cineraria pulchra Cron	FoZ #21501
**Conyza aegyptiaca* (L.) Aiton	FoZ #37464
**Conyza bonariensis* (L.) Cronquist	FoZ #19057
Conyza gouanii (L.) Willd.	FoZ #2258
Conyza pinnata (L.f.) Kuntze	FoZ #7645
**Conyza sumatrensis* (Retz.) E.Walker	FoZ #2471
**Coreopsis lanceolata* L.	FoZ #489

Name / authority	Voucher
**Cotula australis* (Sieb.& Spreng.) Hook.f.	FoZ #933
Crassocephalum crepidioides (Benth.) S.Moore	Chase 8303
Crassocephalum rubens (Jacq.) S.Moore var. *rubens*	FoZ #447
Crassocephalum rubens (Jacq.) S.Moore var. *sarcobasis* (DC.) C.Jeffrey & Beentje	Chase 4576
Crassocephalum × picridifolium (DC.) S.Moore	Chase 2148
Dichrocephala integrifolia (L.f.) Kuntze subsp. *integrifolia*	Chase 7391
Emilia coccinea (Sims) G.Don	FoZ #4114
Emilia discifolia (Oliv.) C.Jeffrey	FoZ #7655
**Erigeron karvinskianus* DC.	FoZ #3551
Erythrocephalum zambesianum Oliv.& Hiern	Wild 469
**Euryops chrysanthemoides* (DC.) B.Nord.	FoZ #41177
**Galinsoga parviflora* Cav.	FoZ #7662
**Galinsoga quadriradiata* Ruiz & Pav.	FoZ #7665
Gerbera piloselloides (L.) Cass.	Chase 8421
Gerbera viridifolia (DC.) Sch.Bip. subsp. *viridifolia*	FoZ #651
**Gnaphalium purpureum* L.	FoZ #2248
Gutenbergia cordifolia Oliv. var. *marginata* (O.Hoffm.) C.Jeffrey	Chase 8291
Helichrysum adenocarpum DC. subsp. *adenocarpum*	Bacon 6844
Helichrysum asperum (Thunb.) Hilliard & B.L.Burtt	FoZ #21420
Helichrysum buchananii Engl.	Chase 6114
Helichrysum candolleanum H.Buek	Carter et al. 2121
Helichrysum cephaloideum DC.	Chase 6026
Helichrysum goetzeanum O.Hoffm.	FoZ #41358
Helichrysum kilimanjari Oliv.	Symoens et al. 687
Helichrysum kraussii Sch.Bip.	Bishop 394
Helichrysum lepidissimum S.Moore	Chase 6115
Helichrysum nitens Oliv.& Hiern subsp. *nitens*	Bacon 6843
Helichrysum nudifolium (L.) Less. var. *nudifolium*	FoZ #4883
Helichrysum nudifolium (L.) Less. var. *oxyphyllum* (DC.) Beentje	FoZ #4884
Helichrysum nudifolium (L.) Less. var. *pilosellum* (L.f.) Beentje	Wild 468
Helichrysum odoratissimum (L.) Sweet	FoZ #2344
Helichrysum panduratum O.Hoffm. var. *panduratum*	Chase 1237
Helichrysum panduratum O.Hoffm. var. *transvaalense* Moeser	FoZ #7468
Helichrysum schimperi (A.Rich.) Moeser	Chase 1237
Helichrysum umbraculigerum Less.	Chase 1355
Hypericophyllum compositarum Steetz	Chase 7093
**Hypochaeris radicata* L.	FoZ #2048
Inula glomerata Oliv.& Hiern	FoZ #1413
Kleinia chimanimaniensis Van Jaarsv. (=*K. galpinii* Hook.f.)	Schelpe 377
Lactuca inermis Forssk.	FoZ #19054
Laggera crispata (Vahl) Hepper & J.R.I.Wood	FoZ #33120
Lipotriche scandens (Schumach.) Orchard subsp. *madagascariensis* (Baker) D.J.N.Hind (=*Melanthera scandens* (Schumach.& Thonn.) Roberty)	Chase 7111
Microglossa pyrifolia (Lam.) Kuntze	FoZ #1621
Mikania carteri Baker	FoZ #4007
Mikania sp. of FoZ	Müller 3036
Mikaniopsis cissampelina (DC.) C.Jeffrey	Fisher 1576
**Montanoa hibiscifolia* Benth.	Wild 5513
**Neojeffreya decurrens* (L.) Cabrera	FoZ #7332
Nidorella auriculata DC. subsp. *auriculata*	FoZ #15227
Nidorella resedifolia DC. subsp. *resedifolia*	Chase 761
Osteospermum monocepahalum (Oliv.& Hiern) Norl.	FoZ #3919
Phymaspermum bolusii (Hutch.) Källersjö	FoZ #15330
**Pseudognaphalium luteo-album* (L.) Hilliard & B.L.Burtt	FoZ #2186
Pseudognaphalium oligandrum (DC.) Hilliard & B.L.Burtt	FoZ #2188
Schistostephium crataegifolium (DC.) Harv. (=*S. artemisiifolium* Baker)	Bishop 395
Schistostephium heptalobum (DC.) Oliv.& Hiern	FoZ #15218
Schistostephium oxylobum S.Moore	Chase 8423
Senecio deltoideus Less.	FoZ #2219
Senecio gazensis S.Moore	FoZ #15411
Senecio hochstetteri A.Rich.	Wild 2821
Senecio inornatus DC.	Chase 6105
Senecio latifolius DC.	Wild 38
**Senecio macroglossus* DC.	Fisher 1545
Senecio milanjianus S.Moore	Wild 2830

Name / authority	Voucher
Senecio oxyriifolius DC.	Wild 520
Senecio purpureus L.	Chase 7140
Senecio ruwenzoriensis S.Moore	Wild 2822
Senecio syringifolius O.Hoffm.	Hopkins 8046
Senecio tamoides DC.	FoZ #2222
Senecio triactinus S.Moore	FoZ #5793
Sigesbeckia orientalis L.	FoZ #84888
Solanecio mannii (Hook.f.) C.Jeffrey	FoZ #469
Sonchus friesii Boulos var. *integer* G.V.Pope	FoZ #922
**Sonchus oleraceus* L.	FoZ #920
Spilanthes mauritiana (Pers.) DC.	Eyles 7082
Stomatanthes africanus (Oliv.& Hiern) R.M.King & H.Rob.	FoZ #15199
**Tagetes minuta* L.	FoZ #35492
Tolpis capensis (L.) Sch.Bip.	FoZ #3753
**Tridax procumbens* L.	FoZ #3925
**Vernonanthura polyanthes* (Sprengel) Vega & Dematteis	FoZ #3740
Vernonia acuminatissima S.Moore	Hopkins 8053
Vernonia adoensis Sch.Bip.	FoZ #25856
Vernonia bainesii Oliv.& Hiern subsp. *bainesii*	Whellan 747
Vernonia calvoana (Hook.f.) Hook.f. subsp. *meridionalis* (Wild) C.Jeffrey	FoZ # 475
Vernonia colorata (Willd.) Drake subsp. *colorata*	FoZ #2322
Vernonia galpinii Klatt	Chase 3105
Vernonia glaberrima O.Hoffm.	FoZ #4878
Vernonia holstii O.Hoffm.	Chase 5595
Vernonia karaguensis Oliv.& Hiern	Chase 7138
Vernonia lundiensis (Hutch.) Wild & G.V.Pope	Ferrar 4069
Vernonia melleri Oliv.& Hiern var. *melleri*	Chase 5582
Vernonia myriantha Hook.f.	Plowes 2706
Vernonia natalensis Walp.	Fisher 212
Vernonia wollastonii S.Moore	Müller 3060
Vernonia petersii Oliv.	FoZ #43356
Balsaminaceae	
Impatiens cecilii N.E.Br. subsp. *cecilii*	Plowes 2322
Impatiens sylvicola Burtt Davy & Greenway	Eyles 5476
Begoniaceae	
Begonia sonderiana Irmsch.	Chase 995
Bignoniaceae	
**Amphilophium crucigerum* (L.) L.G.Lohmann	FoZ #18307
**Dolichandra unguis*-cati (L.) L.G.Lohmann	FoZ #3975
**Jacaranda mimosifolia* D.Don	FoZ #18352
Podranea brycei (N.E.Br.) Sprague	FoZ #3576
Boraginaceae	
Cynoglossum lanceolatum Forssk.	Chase 4390
Cynoglossum wildii E.S.Martins	Williams 215
Brassicaceae	
Cardamine africana L.	FoZ #15459
**Cardamine flexuosa* With.	FoZ #636
**Coronopus didymus* (L.) Sm.	FoZ #19047
**Lepidium bonariense* L.	FoZ #41218
Cactaceae	
Rhipsalis baccifera (J.Mill.) Stearn	Eyles 6589
Campanulaceae	
Lobelia erinus L.	Schelpe 366
Lobelia goetzei Diels	FoZ #867
Lobelia stricklandiae Gilliland	Wild 1592
Wahlenbergia denticulata (Burch.) A.DC.	FoZ #34881
Wahlenbergia madagascariensis A.DC.	FoZ #5012
Wahlenbergia subaphylla (Baker) Thulin subsp. *scoparia* (Wild) Thulin	Chase 3104
Wahlenbergia undulata (L.f.) A.DC.	Chase 6125
Wahlenbergia virgata Engl.	FoZ #3750
Capparaceae	
Cleome monophylla L.	Hyde s.r.
Ritchiea albersii Gilg	Chase 6225
Caprifoliaceae	
**Sambucus canadensis* L.	FoZ #37446

Name / authority	Voucher
Caryophyllaceae	
**Cerastium glomeratum* Thuill.	Whellan 1560
Drymaria cordata (L.) Roem.& Schult. var. *cordata*	Chase 6049
**Sagina apetala* Ard.	FoZ #1808
Silene burchellii DC. var. *angustifolia* Sond.	Chase 7224
Stellaria mannii Hook.f.	Müller plot 68
**Stellaria media* (L.) Vill.	FoZ #79972
Celastraceae	
Allocassine laurifolia (Harv.) N.Robson	Chase 7199
Catha edulis (Vahl) Endl.	Chase 784
Elaeodendron croceum (Thunb.) DC.	Müller plot 150
Gymnosporia buxifolia (L.) Szyszyl.	Chase 5571
Gymnosporia harveyana Loes. subsp. *harveyana*	FoZ #15259
Gymnosporia mossambicensis (Klotzsch) Loes. subsp. *mossambicensis*	Chase 6279
Gymnosporia senegalensis (Lam.) Loes.	FoZ #15183
Hippocratea africana (Willd.) Loes. var. *richardiana* (Cambess.) N.Robson	Müller 3149
Maytenus acuminata (L.f.) Loes. var. *acuminata*	Chase 4416
Maytenus chasei N.Robson	Chase 5634
Maytenus undata (Thunb.) Blakelock	Müller 2803
Chrysobalanaceae	
Parinari curatellifolia Benth.	FoZ #2039
Clusiaceae	
Garcinia buchananii Baker	Chase 5296
Garcinia kingaensis Engl.	Müller plot 74
Harungana madagascariensis Poir.	Chase 1970
Hypericum aethiopicum Thunb. subsp. *sonderi* (Bredell) N.Robson	FoZ #15321
Hypericum peplidifolium A.Rich.	FoZ #15310
Hypericum revolutum Vahl	Chase 1181
Hypericum roeperianum A.Rich.	Whellan 1138
Psorospermum febrifugum Spach	FoZ #15157
Combretaceae	
Combretum molle G.Don	FoZ #23920
Combretum psidioides Welw. subsp. *psidioides*	West 6373
Connaraceae	
Agelaea pentagyna (Lam.) Baill.	Drummond 5079
Convolvulaceae	
**Dichondra micrantha* Urb.	FoZ #929
Hewittia malabarica (L.) Suresh	FoZ #18123
**Ipomoea cairica* (L.) Sweet var. *cairica*	FoZ #1404
Ipomoea involucrata P.Beauv. var. *involucrata*	Chase 2163
Ipomoea obscura (L.) Ker Gawl. var. *obscura*	FoZ #4128
Turbina holubii (Baker) A.Meeuse	Chase 8589
Cornaceae	
Curtisia dentata (Burm.f.) C.A.Sm.	Chase 4168
Crassulaceae	
**Bryophyllum pinnatum* (Lam.) Oken	FoZ #25790
**Bryophyllum tubiflorum* Harv.	FoZ #3407
Crassula alsinoides (Hook.f.) Engl.	Mavi 1558
Crassula alticola R.Fern.	FoZ #39862
Crassula capitella Thunb. subsp. *nodulosa* (Schönland) Toelken	FoZ #7384
Crassula expansa Dryand. subsp. *expansa*	FoZ #79967
Crassula lanceolata (Eckl.& Zeyh) Walp. subsp. *transvaalensis* (Kuntze) Toelken	FoZ #3494
Crassula sarcocaulis Eckl.& Zeyh. subsp. *sarcocaulis*	Ferrar s.n.
Crassula sarmentosa Harv.	FoZ #3499
Crassula setulosa Harv. var. *setulosa*	Chase 6134
Crassula swaziensis Schönland subsp. *swaziensis* var. *swaziensis*	Chase 6149
Kalanchoe crenata (Andrews) Haw.	Chase 8445
Kalanchoe lanceolata (Forssk.) Pers.	FoZ #1620
Kalanchoe luciae Raym.-Hamet subsp. *luciae*	FoZ #4061
Cucurbitaceae	
Coccinia adoensis (A.Rich.) Cogn.	Chase 7388
Cucumis zeyheri Sond.	Chase 8485
Momordica foetida Schumach.	Wild 14218
Oreosyce africana Hook.f.	Chase 6222
Peponium chirindense (Baker f.) Cogn.	Müller 3486

Name / authority	Voucher
Zehneria minutiflora (Cogn.) C.Jeffrey	Ferrar 4020
Zehneria scabra (L.f.) Sond. subsp. *scabra*	Müller plot 169
Zehneria thwaitesii (Schweinf.) C.Jeffrey	Chase 5550
Dipsacaceae	
Scabiosa columbaria L.	FoZ #556
Dipterocarpaceae	
Monotes engleri Gilg	FoZ #557
Droseraceae	
Drosera burkeana Planch.	Carly 467
Drosera dielsiana Exell & J.R.Laundon	FoZ #644
Ebenaceae	
Diospyros abyssinica (Hiern) F.White subsp. *abyssinica*	Müller 3043
Diospyros lycioides Desf. subsp. *sericea* (Bernh.) De Winter	Bamps 626
Diospyros natalensis (Harv.) Brenan subsp. *nummularia* (Brenan) Jordaan	Müller 2556
Diospyros whyteana (Hiern) F.White	Chase 1495
Ericaceae	
Erica hexandra (S.Moore) E.G.H.Oliv.	van der Berghen 623
Erica johnstoniana Britten	Galpin 9267
Erythroxylaceae	
Erythroxylum emarginatum Thonn.	Bamps et al. 648
Euphorbiaceae	
Adenocline acuta (Thunb.) Baill.	Chase 8491
Croton sylvaticus C.Krauss	Drummond 5090
Euphorbia benthamii Hiern	Chase 5539
**Euphorbia peplus* L.	FoZ #581
**Euphorbia prostrata* Aiton	FoZ #3742
**Euphorbia tirucalli* L.	Chase 5161
**Homalanthus populifolius* Graham	FoZ #3728
Leidesia procumbens (L.) Prain	Wild 6447
Macaranga capensis (Baill.) Sim	Chase 5565
Macaranga mellifera Prain	Chase 5455
Neoboutonia macrocalyx Pax	FoZ #7425
**Ricinus communis* L. var. *communis*	FoZ #25729
Shirakiopsis elliptica (Hochst.) Esser (=*Sapium ellipticum* (Krauss) Pax)	Chase 7115
Suregada procera (Prain) Croizat	Müller 2557
Tannodia swynnertonii (S.Moore) Prain	Müller plot 172
**Vernicia montana* Lour.	FoZ #3799
Fabaceae: Caesalpinioideae	
Bauhinia galpinii N.E.Br.	FoZ #506
Bauhinia petersiana Bolle	FoZ #1030
**Bauhinia variegata* L. var. *variegata*	FoZ #17371
Brachystegia spiciformis Benth.	Chase 4153
Brachystegia utilis Hutch.& Burtt Davy	Chase 4154
Chamaecrista kirkii (Oliv.) Standl. var. *kirkii*	Chase 5489
Chamaecrista parva (Steyaert) Lock	Ferrar s.n.
Chamaecrista wittei (Ghesq.) Lock	Chase 8493
Julbernardia globiflora (Benth.) Troupin	FoZ #1040
**Senna didymobotrya* (Fresen.) H.S.Irwin & Barneby	Methuen 43
Senna petersiana (Bolle) Lock	FoZ #3923
**Senna septemtrionalis* (Viv.) H.S.Irwin & Barneby	Grosvenor 11
Fabaceae: Mimosoideae	
Acacia abyssinica Benth.	Chase 7796
Acacia amythethophylla A.Rich.	FoZ #15446
Acacia cornigera (L.) Willd. (=*A. spadicigera* Schltr. & Cham.)	Obermeyer 2061
**Acacia mearnsii* De Wild.	FoZ #3591
**Acacia melanoxylon* R.Br.	Biegel 2431
**Acacia podalyriifolia* G.Don	FoZ #3800
Acacia sieberiana DC. var. *woodii* (Burtt Davy) Keay & Brenan	Biegel 2430
Albizia adianthifolia (Schumach.) W.Wight	Müller 3383
Albizia antunesiana Harms	FoZ #15145
Albizia glaberrima (Schumach.& Thonn.) Benth. var. *glabrescens* (Oliv.) Brenan	Müller 3097
Albizia gummifera (J.F.Gmel.) C.A.Sm.	Wild 1596
Albizia schimperiana Oliv. var. *schimperiana*	Chase 6223
Dichrostachys cinerea (L.) Wight & Arn.	FoZ #15202
Entada abyssinica A.Rich.	Chase 5554

Name / authority	Voucher
Newtonia buchananii (Baker f.) G.C.C.Gilbert & Boutique	Chase 878
Fabaceae: Papilionoideae	
Aeschynomene nodulosa (Baker) Baker f. var. *nodulosa*	FoZ #2041
Argyrolobium rupestre (E.Mey.) Walp. subsp. *rupestre*	Bamps et al. s.n.
Argyrolobium tomentosum (Andrews) Druce	FoZ #41255
Craibia brevicaudata (Vatke) Dunn subsp. *baptistarum* (Büttner) J.B.Gillett	Wild 1586
Crotalaria capensis Jacq.	Corby 1582
Crotalaria cephalotes A.Rich.	Chase 8565
Crotalaria chirindae Baker f.	Hopkins 8033
Crotalaria gazensis Baker f. subsp. *gazensis*	Müller 6684
Crotalaria hyssopifolia Klotzsch	Chase 7055
Crotalaria laburnifolia L. subsp. *australis* (Baker f.) Polhill	Corby 1445
Crotalaria lachnophora A.Rich.	Chase 7449
Crotalaria lanceolata E.Mey. subsp. *lanceolata*	Chase 7469
Crotalaria pallida Aiton var. *pallida*	FoZ #5617
Crotalaria variegata Baker (=*C. sericifolia* Harms)	Chase 6366
Dalbergia lactea Vatke	Müller plot 149
Dalbergia nitidula Baker	Chase 168
Desmodium adscendens (Sw.) DC. var. *robustum* B.G.Schub.	FoZ #35168
Desmodium barbatum (L.) Benth. var. *dimorphum* (Baker) B.G.Schub.	Staples 183
Desmodium repandum (Vahl) DC.	Chase 580
Desmodium setigerum (E.Mey.) Harv.	Chase 8557
**Desmodium uncinatum* (Jacq.) DC.	FoZ #3543
Dolichos kilimandscharicus Taub. subsp. *kilimandscharicus*	FoZ #15323
Dolichos sericeus E.Mey. subsp. *sericeus*	Chase 6930
Dumasia villosa DC. var. *villosa*	Whellan 1598
Eriosema buchananii Baker f. var. *buchananii*	FoZ #52033
Eriosema burkei Harv.	Corby 266
Eriosema chrysadenium Taub. var. *chrysadenium*	FoZ #6264
Eriosema ellipticum Baker subsp. *ellipticum*	FoZ #1617
Eriosema psoraleoides (Lam.) G.Don	FoZ #1697
Erythrina lysistemon Hutch.	FoZ #1688
Flemingia grahamiana Wight & Arn.	Chase 1739
Indigofera arrecta A.Rich.	FoZ #40764
Indigofera cecilii N.E.Br.	FoZ #7519
Indigofera hilaris Eckl.& Zeyh.	Jacobsen 1488
Indigofera lyallii Baker subsp. *lyallii*	FoZ #5628
Indigofera paniculata Pers. subsp. *gazensis* (Baker f.) J.B.Gillett	Chase 6109
Indigofera setiflora Baker var. *setifera*	Hopkins 7080
Kotschya strigosa (Benth.) Dewit & P.A.Duvign. var. *strigosa*	Chase 3732
Lablab purpureus (L.) Sw. subsp. *uncinatus* Verdc. var. *uncinatus*	Chase 8292
Lotononis listii Polhill	FoZ #73221
Lotus arabicus L.	Bamps et al. 676
Lotus discolor E.Mey. subsp. *mollis* J.B.Gillett	Chase 3107
Lotus namulensis Brand	Chase 3106
Macrotyloma densiflorum (Baker) Verdc. var. *densiflorum*	Carter 2128
Mucuna coriacea Baker subsp. *irritans* (Burtt Davy) Verdc.	FoZ #1699
Ormocarpum kirkii S.Moore	Carter 2129
Otholobium foliosum (Oliv.) C.H.Stirt. subsp. *gazense* (Baker f.) Verdc.	FoZ #2366
Philenoptera violacea (Klotzsch) Schrire (=*Lonchocarpus capassa* Rolfe)	Chase 60
Pseudarthria hookeri Wight & Arn. var. *hookeri*	FoZ #2457
Pterocarpus angolensis DC.	FoZ #15141
Pterocarpus rotundifolius (Sond.) Druce subsp. *rotundifolius*	FoZ #98755
Rhynchosia clivorum S.Moore subsp. *pycnantha* (Harms) Verdc.	Fischer 1313
Rhynchosia monophylla Schltr.	FoZ #3749
Rhynchosia swynnertonii Baker f.	Chase 8004
Sphenostylis zimbabweensis Mithen	Chase 1530
Stylosanthes fruticosa (Retz.) Alston	Staples 185
Tephrosia dasyphylla Baker subsp. *dasyphylla*	Chase 1964
Tephrosia festina Brummitt	Biegel 2432
Tephrosia meisneri Hutch.& Burtt Davy (=*T. glomeruliflora* Meisn. subsp. *meisneri* (Hutch.& Burtt Davy) Schrire)	Chase 8151
Tephrosia paniculata Baker subsp. *paniculata*	Chase 7318
Tephrosia rhodesica Baker f. var. *polystachyoides* (Baker f.) Brummitt	Chase 1966
Tylosema fassoglensis (Schweinf.) Torre & Hillc.	FoZ #3927

Name / authority	Voucher
Vigna gazensis Baker f.	Chase 6510
Vigna schlechteri Harms	Wild 2844
Vigna vexillata (L.) A.Rich. var. *vexillata*	FoZ #24719
Zornia milneana Mohlenbr.	FoZ #41451
Gelsemiaceae	
Mostuea brunonis Didr. var. *brunonis*	Chase 6745
Gentianaceae	
Sebaea leiostyla Gilg	Hopkins 7257
Geraniaceae	
Geranium arabicum Forssk. subsp. *arabicum*	FoZ #25127
Geranium incanum Burm.f. subsp. *nyassense* (R.Knuth) J.R.Laundon	Drummond 5093
Pelargonium luridum (Andrews) Sweet	Chase 7921
Pelargonium mossambicense Engl.	Eyles 9276
Gesneriaceae	
Streptocarpus eylesii S.Moore subsp. *eylesii*	Plowes 2170
Streptocarpus hirticapsa B.L.Burtt	Ferrar s.n.
Streptocarpus michelmorei B.L.Burtt	FoZ #627
Streptocarpus umtaliensis B.L.Burtt **NE**	Chase 1374
Halogoraceae	
**Myriophyllum aquaticum* (Vell.) Verdc.	Denny 1312
Heteropyxidaceae	
Heteropyxis dehniae Suess.	FoZ #3610
Hydrostachyaceae	
Hydrostachys polymorpha A.Braun	Chase 6637
Icacinaceae	
Apodytes dimidiata Arn. subsp. *dimidiata*	Chase 366
Iteaceae	
Choristylis rhamnoides Harv.	Chase 1736
Lamiaceae	
Aeollanthus buchnerianus Briq.	Fisher 1627
Aeollanthus serpiculoides Baker	Whellan 749
Clerodendrum cephalanthum Oliv. subsp. *swynnertonii* (S.Moore) Verdc.	Chase 2164
Haumaniastrum dissitifolium (Baker) A.J.Paton	FoZ #73536
Haumaniastrum sericeum (Briq.) A.J.Paton	Hopkins s.n.
Haumaniastrum villosum (Benth.) A.J.Paton	Chase 6566
Hoslundia opposita Vahl	FoZ #1752
**Hyptis pectinata* (L.) Poit.	FoZ #876
**Hyptis suaveolens* (L.) Poit.	FoZ #27586
Leonotis ocymifolia (Burm.f.) Iwarsson var. *raineriana* (Vis.) Iwarsson	FoZ #34929
Leucas milanjiana Gürke	FoZ #3922
Micromeria imbricata (Forssk.) C.Chr. var. *imbricata* (=*Satureja punctata* (Benth.) Briq.)	Chase 7137
Ocimum obovatum Benth. subsp. *obovatum* var. *obovatum*	FoZ #3364
Plectranthus chimanimanensis S.Moore	Chase 6021
Plectranthus esculentus N.E.Br.	FoZ #7536
Plectranthus hadiensis (Forssk.) Spreng.	FoZ #21128
Plectranthus hereroensis Engl.	Chase 6512
Plectranthus kapatensis (R.E.Fr.) J.K.Morton	Chase 5563
Plectranthus lanuginosus (Benth.) Agnew	FoZ #15345
Plectranthus laxiflorus Benth.	Chase 1999
Plectranthus sanguineus Britten	FoZ #2052
Plectranthus swynnertonii S.Moore	Eyles 7084
Pycnostachys reticulata (E.Mey.) Benth.	Chase 2000
Pycnostachys urticifolia Hook.	FoZ #37502
Rotheca myricoides (Hochst.) D.A.Steane & Mabb.	FoZ #873
**Salvia coccinea* Etl.	FoZ #37444
Tetradenia riparia (Hochst.) Codd	Carter 2131
Vitex doniana Sweet	Masterson 570
Vitex madiensis Oliv. subsp. *milanjiensis* (Britten) F.White	Chase 1965
Lauraceae	
**Cinnamomum camphora* (L.) J.Presl	FoZ #23896
**Cinnamomum verum* J.Presl	FoZ #25873
Cryptocarya liebertiana Engl.	Müller 3382
**Persea americana* Mill.	FoZ #3716
Lentibulariaceae	
Genlisea hispidula Stapf	Philcox et al. 8951

Name / authority	Voucher
Utricularia firmula Oliv.	Philcox et al. 8952
Utricularia livida E.Mey.	Chase 6112
Utricularia scandens Benj.	Chase 5539
Utricularia subulata L.	Philcox et al. 8950
Linderniaceae	
Craterostigma lanceolatum (Engl.) Skan	FoZ #53083
Craterostigma sp. no. 1 cf. *lanceolatum*	FoZ #28553
Linderniella pulchella (Skan) Eb.Fisch., Schäferh.& Kai Müll. (=*Lindernia pulchella* (Skan) Philcox)	Philcox 8971
Linderniella wilmsii (Engl.) Eb.Fisch., Schäferh.& Kai Müll. (=*Lindernia wilmsii* (Engl.) Philcox)	Philcox 8972
Loganiaceae	
Strychnos angolensis Gilg	Müller 3801
Strychnos lucens Baker	FoZ #1306
Strychnos spinosa Lam.	FoZ #15189
Strychnos usambarensis Gilg	FoZ #1308
Loranthaceae	
Agelanthus lancifolius Polhill & Wiens	FoZ #39863
Agelanthus molleri (Engl.) Polhill & Wiens	Polhill & Pope 4746
Agelanthus nyasicus (Baker & Sprague) Polhill & Wiens	Chase 578
Englerina oedostemon (Danser) Polhill & Wiens **NE**	Polhill & Pope 4747
Malvaceae: Byttnerioideae, Helicteroideae & Sterculioideae	
Cola greenwayi Brenan var. *greenwayi*	Drummond 5092
Dombeya burgessiae Harv.	Loveridge 1089
Dombeya rotundifolia (Hochst.) Planch.	FoZ #1785
Melhania randii Baker f.	FoZ #3924
Waltheria indica L.	FoZ #37490
Malvaceae: Grewioideae	
Grewia occidentalis L. var. *occidentalis*	FoZ #3190
Grewia stolzii Ulbr.	FoZ #7353
Sparrmannia ricinocarpa (Eckl.& Zeyh.) Kuntze	Chase 1678
Triumfetta annua L.	FoZ #7392
Triumfetta pilosa Roth var. *pilosa*	FoZ #7393
Triumfetta rhomboidea Jacq.	Wild 500
Malvaceae: Malvoideae	
Abutilon sonneratianum (Cav.) Sweet	Wild 472
Azanza garckeana (F.Hoffm.) Exell & Hillc.	FoZ #98753
Hibiscus fuscus Garcke	Chase 8301
Hibiscus shirensis Sprague & Hutch.	FoZ #7152
Hibiscus surattensis L.	Chase 8558
**Malvastrum coromandelianum* (L.) Garcke	FoZ #4040
Pavonia columella Cav.	Fisher 1601
Pavonia urens Cav.	FoZ #1221
Melastomataceae	
Antherotoma naudinii Hook.f.	Schelpe 365
Dissotis princeps (Kunth) Triana var. *princeps*	Whellan 1980
Meliaceae	
Ekebergia benguelensis C.DC.	FoZ #98848
Ekebergia capensis Sparrm.	Chase 555
Khaya anthotheca (Welw.) C.DC.	FoZ #25861
Trichilia dregeana Sond.	Chase 3506
Melianthaceae	
Bersama abyssinica Fresen. subsp. *nyassae* (Baker f.) F.White	FoZ #98884
Bersama swynnertonii Baker f.	Chase 7020
Menispermaceae	
Cissampelos mucronata A.Rich.	FoZ #37441
Cissampelos torulosa Harv.	Chase 1544
Stephania abyssinica (Quart.-Dill.& A.Rich.) Walp. var. *abyssinica*	Wild 495
Stephania abyssinica (Quart.-Dill.& A.Rich.) Walp. var. *tomentella* (Oliv.) Diels	FoZ #27674
Tiliacora funifera (Miers) Oliv.	Grosvenor 265
Molluginaceae	
Corrigiola drymarioides Baker f.	Chase 1183
Mollugo cerviana (L.) Ser. var. *cerviana*	Chase s.n.
Monimiaceae	
Xymalos monospora (Harv.) Baill.	Chase 6179
Moraceae	
Dorstenia buchananii Engl. var. *buchananii*	Chase 6259

Name / authority	Voucher
Ficus chirindensis C.C.Berg	Müller plot 78
Ficus craterostoma Mildbr.& Burret	Plowes 2184
Ficus exasperata Vahl	Masterson 602
Ficus natalensis Hochst. subsp. *graniticola* J.E.Burrows	Hyde s.n.
Ficus rokko Warb.& Schweinf. (=*F. thonningii* Blume in part)	Biegel 2490
Ficus scassellatii Pamp. subsp. *scassellatii*	FoZ #15572
Ficus sur Forssk.	FoZ #3525
Trilepisium madagascariense DC.	Chase 5625
Myricaceae	
Morella pilulifera (Rendle) Killick	FoZ #3553
Myrothamnaceae	
Myrothamnus flabellifolius Welw.	FoZ #2038
Myrsinaceae	
Embelia schimperi Vatke	Chase 1443
Maesa lanceolata Forssk.	Obermeyer 2053
Myrsine africana L.	Chase 5295
Rapanea melanophloeos (L.) Mez	Chase 6739
Myrtaceae	
Eugenia malangensis (O.Hoffm.) Nied.	FoZ #1226
Eugenia natalitia Sond. (incl. *E. nyassensis* Engl., *E. capensis* (Eckl.& Zeyh.) Sond. subsp. *nyassensis* (Engl.) F.White)	Chase 7219
**Psidium cattleianum* Sabine	FoZ #7397
**Psidium guajava* L.	FoZ #3529
Syzygium cordatum C.Krauss	Bamps et al. 621
Syzygium guineense (Willd.) DC. subsp. *afromontanum* F.White (=*S. gerrardii* (Hook.f.) F.White)	Chase 5626
**Syzygium jambos* (L.) Alston	FoZ #25884
Ochnaceae	
Ochna holstii Engl.	Wild 1594
Oleaceae	
Chionanthus battiscombei (Hutch.) Stearn	Müller 3077
Chionanthus foveolatus (E.Mey.) Stearn subsp. *major* (I.Verd.) Stearn	Müller plot 153
Jasminum abyssinicum DC.	FoZ #15266
Jasminum streptopus E.Mey.	Müller plot 149
Olea capensis L. subsp. *macrocarpa* (C.H.Wright) I.Verd.	Müller plot 152
Schrebera alata (Hochst.) Welw.	FoZ #3586
Opiliaceae	
Opilia amentacea Roxb.	FoZ #6110
Orobanchaceae	
Alectra sessiliflora (Vahl) Kuntze (incl. var. *monticola* (Engl.) Melch. & var. *senegalensis* (Benth.) Hepper)	Chase 6035, Philcox 8953
Buchnera speciosa Skan	Chase 4199
Cycnium adonense Benth. subsp. *adonense*	Chase 611
Sopubia ramosa (Hochst.) Hochst.	Bacon s.n.
Striga bilabiata (Thunb.) Kuntze	Wild 2807
Striga elegans Benth.	FoZ #24937
Oxalidaceae	
Biophytum umbraculum Welw.	Chase 5534
**Oxalis corniculata* L.	FoZ #7
**Oxalis latifolia* Kunth	FoZ #5774
Oxalis semiloba Sond. subsp. *semiloba*	FoZ #15219
Passifloraceae	
Adenia digitata (Harv.) Engl.	FoZ #37462
Adenia gummifera (Harv.) Harms var. *gummifera*	FoZ #98866
Adenia lobata (Jacq.) Engl. subsp. *rumicifolia* (Engl.& Harms) Lye	Müller 3621
Basananthe apetala (Baker f.) W.J.de Wilde	FoZ #22042
**Passiflora edulis* Sims	FoZ #3760
Penaeaceae	
Olinia vanguerioides Baker f.	Fisher 1218
Peraceae	
Clutia abyssinica Jaub.& Spach var. *abyssinica*	Whellan 1599
Clutia paxii Pax	FoZ #40916
Clutia swynnertonii S.Moore	Galpin 9271
Phyllanthaceae	
Antidesma membranaceum Müll.Arg.	Müller 3380
Antidesma venosum Tul.	FoZ #15191

Name / authority	Voucher
Antidesma vogelianum Müll.Arg.	Hyde s.r.
Bridelia micrantha (Hochst.) Baill.	FoZ #3580
Cleistanthus polystachyus Planch. subsp. *milleri* (Dunkley) Radcl.-Sm. (=*C. apetalus* S.Moore)	Wild 5551
Margaritaria discoidea (Baill.) Webster var. *nitida* (Pax) Radcl.-Sm.	Chase 5483
Phyllanthus beillei Hutch.	Chase 5596
Phyllanthus ovalifolius Forssk. (=*P. guineensis* Pax)	Müller plot 79
Uapaca kirkiana Müll.Arg. var. *kirkiana*	FoZ #596
Phytolaccaceae	
Phytolacca dodecandra L'Hér.	Müller 3092
**Phytolacca octandra* L.	FoZ #2561
Piperaceae	
Peperomia bangroana C.DC. (=*P. rotundifolia* sensu FZ)	Müller 3067
Peperomia blanda (Jacq.) Kunth var. *leptostachya* (Hook.& Arn.) Düll	Chase 851
Peperomia retusa (L.f.) A.Dietr.	Wild 2836
Peperomia tetraphylla (G.Forst.) Hook.& Arn.	Müller 3061
Piper capense L.f. var. *capense*	Plowes 2163
Pittosporaceae	
Pittosporum viridiflorum Sims var. *viridiflorum*	Chase 7218
Plantaginaceae	
**Linaria vulgaris* Mill.	FoZ #5438
**Plantago major* L.	Ferrar s.n.
**Veronica javanica* Blume	Wild 1591
Polemoniaceae	
**Cobaea scandens* Cav.	Edwards s.n.
Polygalaceae	
Polygala gazensis Baker f.	Schelpe 374
Polygala ohlendorfiana Eckl.& Zeyh.	Chase 7873
Polygala virgata Thunb. var. *decora* (Sond.) Harv.	FoZ #25783
Polygala wilmsii Chodat	Obermeyer 2048
Securidaca longepedunculata Fresen.	FoZ #3920
Polygonaceae	
Oxygonum dregeanum Meisn. subsp. *canescens* (Sond.) Germish.	Craster s.n.
**Persicaria capitata* (D.Don) H.Gross	FoZ #1294
**Rumex acetosella* L. subsp. *angiocarpus* (Murb.) Murb.	FoZ #2778
**Rumex crispus* L.	FoZ #2781
Rumex sagittatus Thunb.	FoZ #2783
Primulaceae	
Ardisiandra wettsteinii R.Wagner	FoZ #2772
Proteaceae	
Faurea rochetiana (A.Rich.) Pic.Serm.	Fisher 337
Faurea rubriflora Marner	Chase 6045
Faurea saligna Harv.	Hyde s.n.
**Grevillea robusta* R.Br.	FoZ #7595
Protea caffra Meisn. subsp. *gazensis* (Beard) Chisumpa & Brummitt	FoZ #7648
Protea gaguedi J.F.Gmel.	FoZ #4872
Protea petiolaris (Hiern) Baker subsp. *elegans* Chisumpa & Brummitt	Mitchell s.n.
Protea welwitschii Engl.	FoZ #1352
Putranjivaceae	
Drypetes gerrardii Hutch. var. *gerrardii*	Hyde s.n.
Drypetes natalensis (Harv.) Hutch. var. *natalensis*	FoZ #5654
Ranunculaceae	
Clematis brachiata Thunb.	Müller 3403
Clematis simensis Fresen.	Müller 3087
Ranunculus multifidus Forssk.	FoZ #98776
Thalictrum rhynchocarpum Quart.-Dill.& A.Rich.	FoZ #2887
Rhamnaceae	
Gouania longispicata Engl.	Simon 925
Rhamnus prinoides L'Hér.	Fisher 1334
Scutia myrtina (Burm.f.) Kurz	Müller 3391
Ziziphus mucronata Willd.	FoZ #5025
Rhizophoraceae	
Cassipourea gummiflua Tul. var. *verticillata* (N.E.Br.) J.Lewis	Chase 1802
Cassipourea malosana (Baker) Alston (=*C. congoensis* sensu auct.)	Chase 5454
Rosaceae	
Alchemilla kiwuensis Engl.	Chase 1162

Name / authority	Voucher
Cliffortia serpyllifolia Cham.& Schltdl.	Chase 1182
**Cotoneaster pannosus* Franch.	FoZ #3811
**Eriobotrya japonica* (Thunb.) Lindl.	FoZ #18306
Prunus africana (Hook.f.) Kalkman	Chase 6198
**Prunus cerasoides* D.Don	Bannermann s.n.
**Rubus niveus* Thunb.	FoZ #2697
Rubiaceae	
Afrocanthium ngonii (Bridson) Lantz (=*Canthium ngonii* Bridson, *C. pseudoverticillatum* sensu R.B. Drumm.)	Müller 3068
Agathisanthemum bojeri Klotzsch subsp. *bojeri*	FoZ #35444
Aidia micrantha (K.Schum.) F.White var. *msonju* (K.Krause) Petit	Chase 5552
Anthospermum ammanioides S.Moore	FoZ #1592
Anthospermum herbaceum L.f.	FoZ #1907
Anthospermum vallicola S.Moore	Chase 6037
Anthospermum whyteanum Britten	Chase 6038
Anthospermum zimbabwense Puff **NE**	FoZ #2034
Canthium inerme (L.f.) Kuntze	Chase 5351
Cephalanthus natalensis Oliv.	Greenway 8802
**Coffea arabica* L.	FoZ #14119
Coffea mufindiensis Bridson subsp. *australis* Bridson (=*C. ligustroides* sensu Garcia)	Drummond 5088
Conostomium natalense (Hochst.) Bremek.	Chase 6039
Coptosperma supra-axillare (Hemsl.) Degreef (=*Tarenna supra*-axillaris (Hemsl.) Bremek. subsp. *barbertonensis* (Bremek.) Bridson)	Müller 2561
Cremaspora triflora (Thonn.) K.Schum. subsp. *triflora*	FoZ #99093
Fadogia ancylantha Schweinf.	FoZ #786
Fadogia homblei De Wild.	FoZ #2219
Galium chloroionanthum K.Schum.	Müller plot 82
Galopina circaeoides Thunb.	Chase 342
Gardenia imperialis K.Schum. subsp. *imperialis*	Chase 6555
Heinsenia diervilleoides K.Schum. subsp. *diervilleoides*	Chase 1466
Hymenodictyon floribundum (Hochst.& Steud.) B.L.Rob.	FoZ #3505
Keetia gueinzii (Sond.) Bridson (=*Canthium gueinzii* Sond.)	Chase 1810
Kohautia amatymbica Eckl.& Zeyh.	FoZ #4405
Leptactina benguelensis (Benth.& Hook.f.) R.D.Good subsp. *pubescens* Verdc.	FoZ #2042
Mussaenda arcuata Poir.	Wild 552
Oldenlandia affinis (Roem.& Schult.) DC. subsp. *fugax* (Vatke) Verdc.	Chase 2162
Oldenlandia goreensis (DC.) Summerh. var. *goreensis*	FoZ #3350
Oldenlandia herbacea (L.) Roxb. var. *herbacea*	Ballings 1734
Otiophora inyangana N.E.Br. subsp. *inyangana*	Chase 7299
Oxyanthus goetzei K.Schum. subsp. *goetzei*	FoZ #3772
Oxyanthus speciosus DC. subsp. *stenocarpus* (K.Schum.) Bridson	Chase 281
Pavetta comostyla S.Moore subsp. *comostyla* var. *inyangensis* (Bremek.) Bridson	FoZ #7191
Pavetta umtalensis Bremek.	Chase 5490
Pentanisia schweinfurthii Hiern	Obermeyer 2029
Pentas purpurea Oliv. subsp. *purpurea*	Eyles 7081
Psychotria mahonii C.H.Wright	Chase 6280
Psychotria peduncularis (Salisb.) Steyerm.	Masterson 559b
Psychotria zombamontana (Kuntze) E.M.A.Petit	Drummond 5098
Psydrax kraussioides (Hiern) Bridson	Müller 25
Psydrax parviflora (Afzel.) Bridson subsp. *chapmanii* Bridson (=*Canthium vulgare* (K.Schum.) Bullock)	Müller 3050
Pyrostria bibracteata (Baker) Cavaco	Müller 3747
**Richardia brasiliensis* Gomes	FoZ #37438
**Richardia scabra* L.	FoZ #3354
Rothmannia fischeri (K.Schum.) Bullock subsp. *moramballae* (Hiern) Bridson	Chase 6999
Rothmannia urcelliformis (Hiern) Robyns	Chase 6210
Rubia cordifolia L. subsp. *conotricha* (Gand.) Verdc.	Greatrex-SRGH 14938
Rutidea fuscescens Hiern subsp. *fuscescens*	FoZ #15915
Rytigynia macrura Verdc. (=R. sp. 1 of Drummond)	Müller 3595
Sericanthe andongensis (Hiern) Robbr. subsp. *engleri* (K.Krause) Bridson	FoZ #3509
Sericanthe sp. A of FZ	Müller 3082
Spermacoce natalensis Hochst.	Hopkins 7096
Tapiphyllum velutinum (Hiern) Robyns	Chase 4151
Tarenna pavettoides (Harv.) Sim subsp. *affinis* (K.Schum.) Bridson	FoZ #3806
Tricalysia coriacea (Benth.) Hiern subsp. *angustifolia* (J.C.Garcia) Robbr.	Müller plot 68
Tricalysia pallens Hiern	Müller plot 91
Vangueria apiculata K.Schum.	Müller 2425

Name / authority	Voucher
Vangueria esculenta S.Moore	Müller 3054
Vangueria infausta Burch. subsp. *infausta*	FoZ #15143
Rutaceae	
Calodendrum capense (L.f.) Thunb.	Hyde s.r.
**Casimiroa edulis* La Llave	FoZ #21844
**Citrus limon* (L.) Burm.f.	FoZ #4034
Clausena anisata (Willd.) Benth. var. *anisata*	Whellan 761
Toddalia asiatica (L.) Lam.	Bamps et al 625
Vepris bachmannii (Engl.) Mziray (=*Oricia bachmannii* (Engl.) I.Verd.)	Chase s.n.
Vepris nobilis (Delile) Mziray (=*Teclea nobilis* Delile)	Chase 5297
Zanthoxylum davyi (I.Verd.) P.G.Waterman	Müller plot 152
Salicaceae	
Casearia battiscombei R.E.Fr.	Chase 6177
Dovyalis lucida Sim	FoZ #79997
Scolopia stolzii Gilg var. *stolzii*	Chase 5594
Trimeria grandifolia (Hochst.) Warb. subsp. *grandifolia*	Drummond 5095
Santalaceae	
Osyridicarpos schimperianus (A.Rich.) A.DC.	Müller 3594
Osyris lanceolata Hochst.& Steud.	FoZ #955
Thesium ussanguense Engl.	Bamps et al 691
Viscum shirense Sprague	Müller 4744
Sapindaceae	
Alophyllus abyssinicus (Hochst.) Radlk.	Chase 6226
Alophyllus africanus P.Beauv.	Carter 2130
Alophyllus chirindensis Baker f.	Müller 3494
Dodonaea viscosa Jacq. subsp. *angustifolia* (L.f.) J.G.West	Williams 223
Filicium decipiens (Wight & Arn.) Thwaites	Chase 1968
Zanha africana (Radlk.) Exell	FoZ #15195
Zanha golungensis Hiern	Müller 3373
Sapotaceae	
Chrysophyllum gorungosanum Engl.	Chase 7690
Englerophytum magalismontanum (Sond.) T.D.Penn.	FoZ #1383
Englerophytum natalense (Sond.) T.D.Penn.	Müller 3622
Manilkara discolor (Sond.) J.H.Hemsl.	Chase 4559
Mimusops zeyheri Sond.	Chase 1741
Scrophulariaceae	
Buddleja pulchella N.E.Br.	Müller plot 146
Buddleja salviifolia (L.) Lam.	Chase 7798
Diclis ovata Benth.	Mavi 1785
Diclis tenella Hemsl.	Chase 6119
Freylinia tropica S.Moore	FoZ #784
Hebenstretia angolensis Rolfe	Chase 6124
Hebenstretia oatesii Rolfe subsp. *rhodesiana* Roessler	FoZ #24443
Jamesbrittenia carvalhoi (Engl.) Hilliard	Chase 259
Nemesia zimbabwensis Rendle	Whellan 1559
Selago goetzei Rolfe subsp. *ambigua* Hilliard	Whellan 1143
Solanaceae	
**Cestrum aurantiacum* Lindl.	FoZ #18295
**Nicandra physalodes* (L.) Gaertn.	FoZ #114
**Physalis peruviana* L.	FoZ #1201
**Solanum aculeatissimum* Jacq.	Biegel 2429
Solanum anguivi Lam.	Müller 2628
**Solanum betaceum* Cav. (=*Cyphomandra betacea* (Cav.) Sendtn.)	Masterson 1327
Solanum campylacanthum A.Rich. (=*S. panduriforme* E.Mey., *S. incanum* auct.)	FoZ #7241
**Solanum lycopersicum* L. (=*Lycopersicon esculentum* Mill.)	FoZ #21088
**Solanum mauritianum* Scop.	FoZ #7344
Solanum terminale Forssk.	Drummond 5083
Sterculiaceae (see Malvaceae: Byttnerioideae, Helicteroideae & Sterculioideae)	
Stilbaceae	
Halleria lucida L.	Plowes 2503
Nuxia congesta Fresen.	Simon 921
Nuxia floribunda Benth.	Plowes 2183
Thymelaeaceae	
Dais cotinifolia L.	FoZ #4994
Gnidia kraussiana Meisn. var. *kraussiana*	Chase 7368

Name / authority	Voucher
Peddiea africana Harv.	Chase 1969
Synaptolepis alternifolia Oliv.	Chase 6502
Tiliaceae (see Malvaceae: Grewioideae)	
Turneraceae	
Tricliceras longepedunculatum (Mast.) R.Fern. var. *longepedunculatum*	Bamps et al 643
Ulmaceae	
Celtis africana Burm.f.	Chase 7012
Trema orientalis (L.) Blume	Bamps et al 728
Urticaceae	
Boehmeria macrophylla Hornem.	Chase 7135
Droguetia iners (Forssk.) Schweinf.	FoZ #3789
Elatostema monticola Hook.f.	Müller 803
Laportea alatipes Hook.f.	Biegel 3498
Laportea mooreana (Hiern) Chew	Chase 6059
Laportea peduncularis (Wedd.) Chew subsp. *peduncularis*	Müller 3398
Myrianthus holstii Engl.	Chase 5790
**Pilea microphylla* (L.) Liebm.	FoZ #37433
Pilea tetraphylla (Steud.) Blume	Chase 7487
Pouzolzia parasitica (Forssk.) Schweinf.	FoZ #15694
Urera hypselodendron (A.Rich.) Wedd.	Chase 8439
Urera trinervis (Hochst.) Friis & Immelman	Müller 3498
Verbenaceae	
**Lantana camara* L.	FoZ #7593
Lantana swynnertonii Moldenke	FoZ #29009
Lippia javanica (Burm.f.) Spreng.	FoZ #1552
**Verbena bonariensis* L.	FoZ #1582
**Verbena brasiliensis* Vell.	Bamps et al 617
Violaceae	
Rinorea convallarioides (Baker f.) Eyles subsp. *convallarioides*	Müller 3495
Rinorea ferruginea Engl.	Drummond 5081
Viola abyssinica Oliv.	Biegel 2423
Vitaceae	
Cayratia gracilis (Guill.& Perr.) Suess.	Chase 7300
Cissus petiolata Hook.f.	Müller 3093
Cyphostemma buchananii (Planch.) Wild & R.B.Drumm.	Wild 2834
Cyphostemma kilimandscharicum (Gilg) Wild & R.B.Drumm.	Chase 8182
Cyphostemma montanum Wild & R.B.Drumm.	FoZ #1776
Rhoicissus rhomboidea (Harv.) Planch.	Chase 7394
Rhoicissus tomentosa (Lam.) Wild & R.B.Drumm.	FoZ #3574
Rhoicissus tridentata (L.f.) Wild & R.B.Drumm.	FoZ #15342